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COMMUNICATIONS.

STATISTIC AND OTHER FEATURES OF STILL-BIRTHS.

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Of Philadelphia.

A familiar passage of a well-known book reads, "Man that is born of a woman hath but a short time to live." To what a great number, however, not even that pitiful tale applies! The still-born, those who die before experiencing a glimmer of consciousness, are shockingly numerous. It is not a pleasant subject on which to dwell, but many features of it are not without interest, and some certainly well deserving of the study of physicians.

I may remark, before proceeding to present statistics of still-births, that the children who die at the threshold of life are very often such as deserve to cross it. If this were not the case, I would not suggest a regret that the number of still-born is so great. For I believe it is not a misfortune altogether either to the child itself, or its parents, if denied a brief season of miserable life. The world is over-stocked with puny children, without promise. It was not rank unwisdom on the part of the Spartans to have infants cast aside whom "nature had not given at first any strength or goodness of constitution." (See Plutarch's "Life of Lycurgus.")

The average number of still-births in Philadelphia, every year for the ten ending with 1883, was 877. This number is equal to one to every 21.5 of the children born alive and reported. And, curiously enough, the number bears almost a like proportion to the number of deaths, being one to every 21.4.

There is sufficient reason for believing that the still-births are not all reported. But no doubt there are some cases put on record as such that ought not to be, not being dead when born.* Tidy very properly says: "Nothing can justify the use of the term being applied to children that have lived for some time after birth, as certain authors have done." (*Legal Medicine*, vol. iii., p. 157, Wood's Library Edition.) However, whether the children erroneously said to be still-born are equal to the number said to be born alive, when really still-born, cannot be definitely known. I am inclined to think that there are many instances of the latter, especially among Roman Catholics, by whom children who die before receiving baptism are consigned to unhallowed graves. It is easy for the doctor to deceive his patient; and, indeed, a little deception is, to some extent, excusable here, if it be likely that it will prevent serious trouble of mind, or body, or of both. The good nature of doctors generally makes them disposed to please their patrons.

The returns of still-births are, no doubt, far

*In the eye of the law, a child may breathe, and even cry, and yet not be born alive. Unless completely extruded from the mother, a child is not legally born. It can hardly be denied, however, that a breathing child is a living one. Is a child, then, that breathed, but has ceased to breathe before it has been completely extruded from the mother, still-born, or not? Legally, it is, and hence should be so regarded by the attending physician. Again, what is the test of being alive after birth? Breathing would seem to be enough. Tidy says: "The beating of the child's heart is of all tests the test of live-birth" (op. cit., p. 156). According to Scotch law, the child must cry.

less defective than those of live-births in Philadelphia. This is accounted for by the fact that a burial cannot take place without a death certificate. The returns of live-births are known to be extremely defective. As already stated, the number scarcely exceeds the number of deaths. Some years it is even less, as in 1875, 1876, and 1881. The deficiency is likely over a quarter of the whole.*

I have said above that in Philadelphia the still-births bear almost the same proportion to the number of deaths as to the live-births reported. Doubtless the actual proportion of still-births to deaths is very nearly one to 21.4. In connection with this statement, I deem it of interest to give the following table, compiled from the United States mortality statistics for the census year ending June 1, 1870:†

State.	*Proportion of Still-births to the whole mortality.*
Connecticut	1 to 104.5.
Georgia	1 to 24.5.
Illinois	1 to 30.3.
Indiana	1 to 69.0.
Iowa	1 to 70.5.
Louisiana	1 to 27.3.
Massachusetts	1 to 93.3.
New York	1 to 112.1.
Pennsylvania	1 to 39.4.
Virginia	1 to 60.0.
Wisconsin	1 to 50.0.

These figures are certainly very remarkable. In Georgia the still-births are equal to one to every 24.5 of the deaths, while in New York they are only one to every 112.1! The Southern States have far the most still-births. Still, the returns for Illinois are not good, and those for Pennsylvania are little better.

It is proper to state that the census returns are in some respects misleading. They are not at all complete; and it is probable that the returns of still-births are more defective than the mortality returns in general. But there is no reason to believe that the returns are much more defective in one State than in another; so that comparisons of the returns of the different States are not at all unfair. A cause of difference in the relative number of still-births to deaths in general in different States, which should be taken into account is the fact that the birth-rate is generally comparatively high and the death-rate low in recently-settled States. In this, one finds some excuse for the large proportion of still-births in Illinois. In Iowa, however, the proportion is not half as large. What is the reason? I do not know. A similar contrast is seen in the returns of two of the older States, Pennsylvania and New York. Who can shed light on the matter?

One still to every 21.5 living births is by no means a very bad showing for Philadelphia. If the returns were complete, it is probable that the proportion would be less than one to every 25. Tidy quotes extensive statistics in the *British and Foreign Medical Review* (No. VII., p. 235) which indicate that from one in 18 to one in 20 births are still-born." (Op. cit., v. iii., p. 157.) Quetelet gives a table in which the proportion of still-births to the whole births are represented to be as follows:

Paris	1 to 19
Berlin	1 to 20
Vienna	1 to 24
London	1 to 27
Stockholm	1 to 36
Strasburg	1 to 11

The mean of the whole table is one to about 22. It is but fair to add that Quetelet's figures are not recent, the work in which they are given being published in 1835. (Sur l'Homme et le Développement de ses Facultés.)

I may state that it would be unfair to compare the proportion of still-births in a city, say Philadelphia, with the proportion in a state or nation, for the reason that the proportion is always greater in cities than in the country. Quetelet studied this point, and presents statistics showing that while the proportion in cities is one to 20.4, it is only one to 38.2 in the country. As to why this difference exists, he says: "May it not be attributed in part to the use of corsets and the habit of tight lacing?" (Op. cit., v. i, p. 125.) Tight lacing is common in the country as well as in cities; and I am not inclined to agree with the philosophical statistican, that it has much to do in producing still-births. A poor state of development and health in cities is doubtless at the bottom of the matter, and the causes thereof are too numerous to mention.

The relation of the season of the year to the number of still-births is an interesting matter. The average yearly number for the ten years ending with 1883, in Philadelphia, in each of the four quarters was, in the first, 237; in the second, 215; in the third, 208, and in the fourth, 217. According to these figures, the cases are pretty

*Expression cannot be too often given to the regret that birth returns and other vital statistics, are extremely defective, and also extremely different in their degree of imperfectness in different places. In some respects it would be better to have no statistics at all than those common in this country.

†The returns of the census of 1880 are not yet published. Blame is placed on the printer. The delay is disgraceful.

evenly scattered over the year. Dividing the year into quarters, beginning with December, the figures are, 231, 231, 210, and 205 respectively. Hence, there were 462 in the colder and 415 in the warmer half of the year. The difference is only 47; still, this is a tenth. These statistics are in accordance with the conclusion of Quetelet that "the number of still-births is greater during winter, and following it, than in summer." (Op. cit., vol. i., p. 128.)

The average number of cases for each of the months during the ten years is as follows:

January	81
February	74
March	82
April	72
May	77
June	66
July	73
August	71
September	64
October	74
November	67
December	76

September would seem to be the month in which a child runs the least risk of being still-born. The still-births are fewer in that month than in any other, although the births in it are more numerous than in many others. As to the latter point—an important one—I may give the following statement from an article published some time ago:

"The figures for a series of years show that about fourteen per cent. less births occur, in Philadelphia, in April than January. April, May, June, February, March, and November, are the months in which the deficiency is specially noticeable." (Medical and Surgical Reporter, August 9, 1879.)

Another important fact to bear in mind is that the months are not all of equal length. Thus, February is from two to three days shorter than the others.

May appears to be the month in which a child runs the greatest risk of succumbing in the ordeal of birth. According to the table, March is the month; but the births in the latter are a ninth more than in the former.

From February forward to May the chance of being still-born increases slightly. This is equivalent to saying that the later in spring a birth occurs the more likely it is to be a still-birth. The explanation may be supposed to lie in the size of the child and the strength of the mother.

With the conclusion just drawn, I have another of equal interest to couple. As already pointed out, it is in September that the chance of a child's being still-born is slightest. August is the next month in degree of favorableness, and July next. Now, it will be observed that these months when reversed then stand in their natural order. Hence it appears that the child that passes most warm months toward the end of uterine life in its mother's womb, runs the best chance of getting out of it in safety. The increasing laxity of fibre produced in the pregnant woman by the heat of summer may have something to do with the matter. It may be that a difference in the size of the child affords another reason. As to vital force, one would expect September's child to be less well endowed than June's.

A study of the sex of still-born children brings to light some curious facts. One of the most remarkable is, that in the economy of nature the female is specially favored at the beginning of life's course. The female still-births in Philadelphia are to the male in the proportion of 100 to 132. This statement is based on the returns for the ten years ending with 1883. According to the report of the Board of Health for 1875, the proportion for the fourteen years ending with 1874 was 100 females to 136.4 males (p. 59). The difference is even greater than this in some places. Thus, in France, for the ten years ending with 1875, there were 144 males to 100 females.

It has been said that the great difference between the number of male and female still-births "is in obedience to a general law which operates with slight variation among different nations and races, through causes which are as yet not well determined." (Report of Board of Health of Philadelphia for 1875, p. 59.) Quetelet was of that opinion; after citing statistics showing about 100 females to 140 males, he refers the difference "à une cause spéciale." (Op. cit., p. 123.) He indicates it as follows: "The conception of a boy supposes a certain excess of force (excès de force) in the woman. The excess should continue during her pregnancy. Should there be a decline, the infant will suffer much more if it be a boy than if a girl." (Ibid. p. 124.) This may safely be accepted as a cause, but not the cause.

The excess of male still-births is said by a writer in "Buck's Cyclopædia of Hygiene," vol. ii., p. 315, to be "no doubt in consequence of the greater difficulty of child-birth due to the superior size of male infants." Hence, he lived to make this statement, because his head was not very large; and, of course, this affords an excuse for its weakness. I cannot agree with him (I do not recall his name); but it is certainly true that

far better than the straight wooden ones which have been sold through the country. At the end of a month, gentlest passive motion of the joints should be given to prevent anchylosis.

The cause of deformity in a large number of cases comes of taking off the splints too early. Eight weeks is not too long keeping the limb motionless, save the passive motion which must be given by the surgeon himself. The first deposit has not the firmness of bone which is deposited later, and will not bear the strain of slightest usage without bending. Bony and firm union, it is stated, is not complete until three or four months. I encase the limb after the removal of the casts in starch bandages and pasteboard, allowing free motion of the joints. They are very light and very firm, and clothing can be worn over them; they give protection, are not in the least troublesome to the patient, and should be worn until union is fully completed. Especially is this necessary in fractures of children, who are more apt to take risks. After this manner many of the deformities resulting from too early taking off of splints may be avoided. I know of no result more gratifying to the surgeon than to find, at the last removal of the splints, a perfectly natural appearance of the limb at so late a day, that we can feel assured it will remain so.

Let me emphasize the importance of this later treatment. At the end of six weeks, on giving the limb passive motion, we find the fracture beginning to be firm and in good apposition and outline, the patient is confident that he has a good arm or leg, he asks for greater freedom: in an evil moment you tell him he can use it a little. From that time he will be apt to use it too much, and at the end of second month you have the mortification of seeing a deformity, not that of shortening, but a curvature. If an arm, he has lifted too heavy; if the leg, he has thrown his weight upon it and walked unassisted, and what we had so well accomplished has been destroyed, and if your patient and his friends have ingratitude and cussedness enough, you may hear of threatened prosecution for damages. At any rate, we suffer loss of reputation, and the patient a loss of the full use of his limb.

We rather must say, "No, sir; you must wear your splints another month, and do not use your arm, but continue to carry it in its rest as before." Or, "Don't throw any weight on your leg, but use a crutch;" and tell him of the danger of deformity if he does not heed the advice. I know of no cases requiring plain language more than these, and an intelligent patient will see the wisdom of it.

Ahl's felt splint, made in Philadelphia, is a very firm and adaptable splint, first immersed in hot water, and moulded to the part, then hardened with cold water. Also there is a similar one manufactured by Pietrie, of New York, the latter best worked with dry heat. I have used both with the plaster made of the consistence of cold molasses, after placing the fractured ends in good position and outline, and having cut and fitted it as close as the substance will allow (often to the arm of another person of same size and length).

Pour along the hollow of the splint the plaster, enough to fill all the depressions of surface of the limb, over this a layer of cotton-batting, of width and length of splint, press it down firmly to its place, hold still a few minutes till the plaster has set, then the opposite one in same manner. Now the plaster is hard and the splints are rigid, and we have the most accurate cast of the part possible. There should be a slight intervening space between the splints, which are held snugly to the limb by the common bandage, slackened or tightened, according to the swelling. The advantage of this method over the plastic bandage is, there is no cutting open to be done, it is more cleanly, with accuracy of fit and perfect control. Increase of transverse diameter, and shortening by the ends sliding by, is less likely to happen. They are as unyielding as the bone, and as smooth as the skin. I do not remember to have seen a description of plaster being used in either of these ways; but I have used it in this manner quite a number of years, and with results so satisfactory that I shall be slow to change it.

Paper makes a good pattern, laying on the limb and cutting its edges till the width and length are right; lay the paper on the material, and cut it while hot. I have used the plaster alone in fracture of patella with best results. With leg raised and extended, co-apt the fragments, which are best held in position while the plaster is setting by broad and long pieces of adhesive plaster laid over the patella and across the leg with only the middle of the plaster moistened, the free ends held by assistants, drawing downwards the upper fragment and upwards the lower one; also draw and press upon the middle of the patella, so that fragments will not tilt up, as they are approximated and held there. Then lay on the plaster folded in moistened cloth, with free edges turned under. Plaster should be an inch in thickness over the bone and thinner at the edges, and extend three inches

above and below the knee, and two inches posteriorly from its inner and outer edges. A figure-of-eight bandage is now applied tightly before the plaster sets, so that it shall press the plaster down into the depressions above and below the patella, as well as at the sides. Of course, the straight posterior splint must be used and no flexion allowed in less than three months. Salt can be used to harden the plaster rapidly. Use the best dissolved glue to make it firmer, though it hardens much slower. Sometimes swelling, which rapidly follows fracture from effusion of serum and blood, will delay the use of casts for a few days. In such case, the fractured limb can be placed in a trough with bran packed along the sides to keep it steady; this will allow of friction with liniments or other applications, until ready to be secured by permanent support.

REFLECTIONS AND SKETCHES OF TOWN AND COUNTRY PRACTICE.

BY GEORGE HILL, M. D.,
Of Hughesville, Pa.

(*Concluded from page* 391.)

The sordes in this and other diseases has always been with me a symptom of importance, indicating, as it does, great impoverishment and often rapid reduction in weight. That is, the man goes down at 160 pounds or more, and gets up at 130 or less. And I am surprised to find so little in authors concerning this sordes, they often barely mentioning that it occurs. I do not except Liebermeister, whose systematic work and large experience has probably done more to mould in this country the treatment of *typhoid fever* than any other recent author on either side of the sea. What is it? And where does it come from? Are the lungs performing a vicarious work in throwing it off in expiration as *debris* of the wasting fat, to accumulate by accretion upon the perfectly dry tongue, lips, and teeth? Who knows?

This disease is called a fever *per se*—an *idiomatic cobweb* that should be brushed away, as there is no such thing as fever *per se*. Fever, pain, and vertigo are at best secondary; and the first-named never appears earlier than third or fourth in the series of disturbances in any disease. Any of these symptoms, and others, of course, may assume a prominence that shall require immediate attention, even before the cause, primary or remote, or lesion, temporary or more or less fixed, can be antagonized.

Fever is simply *a name* for the accumulation of heat by abnormal friction in the vital tissues, and no more entitled to be termed the *disease*, than that tenesmus should be the name for what is called dysentery. And in this sense only should fever ever be regarded as a *cause* secondarily involving collateral consequences.

My first special attention to the merits of fever as a factor in disease was aroused in a case of complicated rheumatism, in a soldier just returned from the Mexican war. One morning on my visit to see him, I discovered at the post the fat horse and carriage of my quondam friend, root-doctor Y. He was kind enough to meet me at the gate, and in a most pleasant and patronizing mood, said:

"*I hope you will not be offended, as I have a plan by which we can both attend.*"

How?

"*Why, you go right straight on, and doctor him for the fever, and I will doctor him for the rheumatiz.*"

Thanks; you can take care of the *rheumatiz*, and the fever will take care of itself.

Typhoid fever is generally more or less gradual in its approaches. The remote cause, a parasite; the immediate, a lesion, acquiring, after a time, a grade of inflammatory action more or less intense. Therefore, I sometimes bleed early in the disease, and when the patient is plethoric, or where there is severe pain in the head, and, of course, while the blood is yet capable in its coagulation of giving a fair exhibit of the inflammatory buff, ten grains of calomel, more or less, followed by glycerine and castor oil, in equal or unequal quantities, and to which is added a drachm, more or less, of spirits of turpentine; these ingredients to be warmed and shaken until the spirits of turpentine is entirely broken up, and then given. This is followed up every second day, or oftener, during the first stage of the disease, and, together with quinine, constitutes the *anti-parasitic treatment*. Throughout the first stage of the disease there are always slight chills daily, to antagonize which, twenty to sixty grains of quinine are given in doses of one or two grains every two or three hours until all chilliness disappears. Then this drug is entirely discontinued. Quinine given in small or moderate doses, and well directed, is harmless. But given largely, it is a brain disturber—often more or less serious and permanent. In doses of ten to twenty grains its effects are reflex, and by absorption are seen especially in intermittent fever. Here no amount of caution can prevent the erectile tissue of the sweat glands and their spiral ducts from taking on spasm and producing what is commonly called *goose-skin* or the *shakes;* and when this is spread over 1,400

square inches or more of surface, it is not surprising that congestion and lesions occur sufficient to set up the excitement, which means fever.

It is the unvarying effects of this drug in chills and fever which has led me to believe that if ever the *marsh microbe* is found, it will be in the sweat-glands and their ducts.

After the dry tongue and sordes appear, the treatment consists of digitalis and ipecac; the first while the pulse has sufficient resistance, the latter throughout, and often up to the verge of nausea. Also calomel in half-grain doses, more or less, with opium to counteract diarrhœa; and an emulsion composed of gum arabic, glycerine, and spirits of turpentine, so that ten drops of the latter may be given two or three times a day, to prevent meteorism, etc.; and sometimes a jug of hot water to the feet and pounded ice in bladders to the head. And in order to insure the gradual and certain radiation of internal heat, tepid water, to which is added a little glycerine and a pinch of common salt, is used. The body and limbs are gently sponged in imitation of perspiration, as better results are obtained in this manner upon even a partially-relaxed surface than by *cold sponging*, *the cold pack*, or *the cold bath;* these latter causing constriction of the surface, in short chills, *secundum artem!* which every one ought to know is the worst condition the surface of the body can be placed in for the radiation of internal heat, in fact, causing its accumulation as revealed by actual experience—the clinical thermometer in the rectum registering as high or higher after than before the process, to say nothing of other evils growing out of the multiplied shocks. This is greatly at variance with modern authors, especially the Germans, who, however, are much to be lauded for their untiring zeal and systematic work.

The diet in bad cases is nil, for the reason that not a single function in the whole process of digestion can be performed. Hence new complications are set up by any sort of food. The patient in such cases is only allowed water or gum-arabic water flavored, with good tea or coffee, warm, tepid, or cold. The *starvation theory* is not here advocated. But, vox naturæ, vox Dei est. Want of appetite and apathy for food are a part of that voice, the vibrations of which are recognized throughout all animated creation. And whatever man may have gained or lost by evolution, these instincts remain to assert rights which we are bound to respect. Also what is said of food may be said with greater force of drugs that are never prescribed without an irresistible indication. And whatever else may be required of the physician, these three things are indispensable: *Nothing* with good words, the LANCET, and the hypodermic syringe. And often the best of these three, is *nothing*.

Nine cases have been treated during a part of the last three months. All have recovered, except the first-mentioned case. None became fairly convalescent in less than three weeks. Several never presented sordes. And the only reason for not insisting that these eight cases of *typhoid fever* were in a very great measure aborted by treatment, is that it is still fashionable to say that this disease is *self-limited*, which is only a sly way of asserting that we know a thing very well, that we do not know at all.

HOSPITAL REPORTS.

PHILADELPHIA CITY HOSPITAL.

CLINIC OF EDWARD T. BRUEN, M. D.,

Physician to the Hospital and Assistant Professor of Physical Diagnosis in the University of Pennsylvania.

Reported by WILLIAM H. MORRISON, M. D.

Pneumothorax.

GENTLEMEN: The case which I bring before you this morning is one of great interest, and will afford an opportunity of demonstrating a physical sign which is very characteristic, and which is particularly significant of the disease with which this patient is suffering.

The man, thirty-six years of age, was admitted to the hospital one month ago. At that time, the only evidences of disease were an area of impaired resonance in the inferior lateral aspect of the left side of the chest, together with distant respiration and a few superficial crackling rales. Over the upper part of the left lung the breathing was feeble, but otherwise natural. The right side was healthy. The patient was walking about, and did not appear to be very sick. In about a week, he was remanded to the chronic ward. I mention these points, as he is now gravely sick, to show you that we did not consider him seriously ill when first admitted.

About one week ago he complained of feeling very sick, and the temperature went up to 103°, and for several days it fluctuated between 103° and 100°. He had no sweats and no chilly feelings, but simply the rise in temperature, which was somewhat of a hectic type. With this there was more cough than there had been, and a good deal of expectoration, which came up as chunks of yellow mucus. There was also some pain in the left chest, and a little dyspnœa, but this was very slight.

Inspecting the chest as the patient lies upon the table, it can be distinctly seen that the movement of the right side is exaggerated, and not only so, but that this side is more distended than the left side. On the left side there is very little

respiratory movement, and in addition it seems to be retracted. Observing the left chest more closely, we see that such movement as is present is due to the movements of the diaphragm.

On auscultation, there is found all over the right chest exaggerated respiratory murmur. On the left side very little respiratory murmur can be heard, there being simply a blowing sound in inspiration. Connected with this, there is a clear metallic tinkling sound, similar to that produced by dropping a coin into a basin. I shall presently allude to the importance of this sign. It is audible all over the lower zone of the chest anteriorly; in the axilla and also over the lower portion of the chest posteriorly. Studying the respiratory action a little further, there is found about three inches from the left border of the sternum an area of bronchial breathing, with a few crackling rales. This area is about the width of the finger. Over the scapular region of the left chest, posteriorly, there is also heard bronchial breathing. The heart-sounds are not very distinct.

Even those of you who have more experience in physical diagnosis would find the further study of this case rather difficult. Percussion on the left side of chest gives a low pitched tympanitic sound. It is full and clear, and very much like the resonance developed over an emphysematous lung. It closely resembles vesiculotympanitic resonance. On the right side there is exaggerated resonance. It would take a well-trained ear to recognize the difference between the exaggerated resonance on the right side, and the tympanitic resonance of the left side. This latter resonance is of lower pitch than the tympany of the stomach, and also lower than that of the vesiculo-tympanitic resonance. This sound so closely resembles the normal resonance that I should have considerable hesitation in making a diagnosis from it alone. If, however, I take two silver dollars, or other pieces of metal, and have an assistant use one of these as a plexor and the other as a pleximeter, while I listen with a stethoscope, I hear a distinct tinkling sound, very clear and resonant, and entirely different from the dull resonance produced when the dollars are struck in the open air, and this latter physical sign has special diagnostic importance.

The physical signs which I have mentioned indicate the condition known as pneumothorax. The pleural cavity, which, by the way, is not a cavity normally, is filled with air, and the lung is compressed.

How does the air enter the pleural space? How did it get there in this instance? What has the air to do with the physical signs? There are several ways in which the air can enter the pleural cavity. The most common is in the process of phthisis, where ulceration of the visceral pleura takes place, and a perforation of the vesicular substance allows the air to pass from the lung to the pleural cavity. There is a good reason why this is not a common occurrence. Usually in phthisis, especially in the more chronic forms, the pulmonary and costal pleura become adherent through chronic inflammatory processes, thus preventing this accident. If this union has not taken place, and the lung tissues are weakened by the inflammatory process, they may yield in a fit of coughing, and the pleural membrane give way. Sometimes there is a direct ulceration through a cavity without extensive involvement of the lung. If a person suffering with phthisis, under the above conditions, attempts to carry a heavy weight up-stairs, or in any way putting a sudden excessive strain on the air within the chest, may cause a rupture. Pneumothorax then usually occurs from rupture of the visceral layer covering a cavity, or sometimes from softening and ulceration along the border of the lung, yielding to tension.

Next in frequency, pneumothorax occurs from the introduction of air from without. In the process of tapping the chest, air is sometimes allowed to enter, and the same thing often happens in fractures of the ribs from perforation of the visceral pleura. Occasionally the pleura is opened by processes in adjacent structures. Abscess of the liver may open by ulceration of the diaphragm and its pleura, and by perforation of the visceral pleura lead to pneumothorax. Sometimes it results from disease in the œsophagus. Its most frequent association is, however, with phthisis: but I have reasons for thinking that such is not the case in this instance. This patient does not seem to have been suffering with phthisis. When I examined him on admisssion, I thought that the chronic pleural adhesions were the only lesions; therefore this case probably belongs to the class which is sometimes described under the name of idiopathic pneumothorax, in which the condition takes place without a recognizable cause. I would explain this case in the following way. The adhesions of the lung to the chest have been followed by inflammatory changes in the lung abutting the pleura. This chronic inflammation has caused softening of the tissue of the lung along the border of the pleura, so that the lung being fastened to the thoracic walls, and its tissue being softened, a cough or a strain may produce rupture of the visceral pleura with the escape of air. I have the additional reason for this explanation, though the lung is confined doubtless by pleural adhesions in the region over which I hear bronchial breathing, that is, near the sternal border in front, and over the scapular region behind. Over this region, none of this tinkling on percussion which I regard as so diagnostic is heard. At the same time we have a reserve diagnosis, and that is that there may have been a certain amount of phthisis in the patient's case. So much for the condition. Let us now turn to the explanation of the physical signs.

First, in regard to the metallic tinkling heard on auscultation. It is important in these cases to settle one thing, and that is whether or not there is any communication between the lung and the pleural cavity. When the metallic tinkling disappears, you may infer that the opening has been closed. The opening from the lung is apt to be valve-like, permitting the entrance of air from the lung, but preventing its egress. Consequently the air accumulates in the pleural cavity and remains there. The air passing in with a jet, disturbs, I suppose, the relations of the fluid in the pleural cavity, developing a splash and gives rise to the tinkling. The moment the opening in the visceral pleura closes, the tinkling ceases. You will at once say no reference has

been made to fluid in the pleural space: how does it occur? The moment that air passes in from without, certain germ organisms or septic matters pass in, and the presence of these creates irritation of the pleural membrane, resulting in pleurisy and effusion of liquid. Air itself is not a damaging agent; the pleural space may contain considerable aseptic air, which will be absorbed without causing any trouble. If, however, the air contains organisms, pleurisy is produced, causing hydro-pneumothorax. If the fluid becomes purulent, it constitutes pyo-pneumothorax.

Now, in regard to the tinkling heard on percussion with metals, I presume it is due to the transmission of an impulse of air through a large cavity with thin walls, containing air. As a practical fact, in all my experience in physical diagnosis I have never found this metallic tinkling in percussion present in any other condition than pneumothorax. I have never found it in phthisis with a cavity, and the only condition in which I could conceive of it being present would be where an entire lobe was converted into a cavity, for there the condition would bear some resemblance to that found in pneumothorax. This is, however, a condition so rare that I have never met with it. I think that this is a pathognomonic sign of pneumothorax, and it is about the only pathognomonic physical sign that I know of. The metallic tinkling is also dependent on the presence of an opening between the pleural cavity and the outside air. If the air is imprisoned in a sac, this tinkling is not so well developed as when there is a patulous opening in the pulmonary pleura, and a free opening in the intercostal space also reduces the clearness of the percussion note. The value of the metallic tinkle on auscultation is not so high, since it can be heard over large pulmonary cavities or over large or dilated bronchial tubes when there is an accumulation of mucus. In pneumothorax, however, the metallic tinkle ceases if the communication with the external air is cut off. These two signs, then, not only have an important application in the diagnosis of the condition, but they also afford a means of determining the presence or absence of an opening between the lung and pleural space.

What is the reason that there has not been more dyspnœa? We should expect marked dyspnœa with pneumothorax. As a matter of fact, dyspnœa is present just in proportion to the acute development of the affection. In the present case, I think that the pneumothorax has developed in a localized segment of the pleural cavity, the balance of the chest being occupied by the lung. This is a sacculated pneumothorax, and is similar to a sacculated pleural effusion. The patient has, therefore, all of the right lung and a portion of the left with which to breathe. As I have said, pneumothorax is quite a frequent accident in phthisis. In this disease, the needs of the system for air having been reduced, dyspnœa may not be marked. The cases in which marked dyspnœa occurs are those in which there is little disease of the lung at the time that perforation takes place. In some of these cases, the dyspnœa is sufficient to render the patient cyanosed. This condition follows the slighter forms of disease where there is a large portion of the healthy lung compressed. In this instance the adhesions have prevented complete compression of the lung.

With the physical signs which I have mentioned there is another which is a very crude but old sign, being known to Hippocrates, who recognized the presence of fluid in the pleural chest by taking the patient and shaking him, in the same way as you would shake a bottle to determine whether or not it contained liquid. By this process you develop in the patient's chest a succussion or splash—a vibration of the fluid which is audible. This is present in this case.

The next question is, What shall be done for a patient under such circumstances? If the pneumothorax occurred in a patient with advanced phthisis, I should let it alone, because if the chest is tapped and the fluid withdrawn the patient is exposed to the dangers of excessive suppuration. The principle involved is practically the same as guides us in the treatment of cold abscess. You aspirate, if the patient's strength is sufficient to stand the drain. If the patient's condition is good, the case should be treated as one of empyema by opening and putting in a drainage-tube and thoroughly draining this abscess as it really is. As soon as you are certain that there is purulent fluid, open the chest and drain it. By so doing, you hope that the valve-like opening will close, and that after a time the cavity will heal. Sometimes the opening in the lung heals, and then you have a condition similar to sacculated pleurisy, and probably with pus, so that it is desirable to tap even if you know that the opening may heal possibly if the case is left to itself. In the present instance, I have not yet tapped, because I wanted to be sure that the fluid which is present is purulent. If there is only serous effusion, I would rather wait and let the opening close if it would, and have the fluid absorbed by the ordinary processes. We determine the presence of pus chiefly by the existence of hectic. If there were chill, sweats and temperature of a hectic type, I should consider it proper to at once proceed with the operation. I expect the formation of pus, and as soon as I think that it is formed I shall insert the tube of the aspirator and draw off a little of the fluid for examination. If it is found to be pus, a drainage-tube will be inserted. The easiest way of doing this is by passing the tube through the canula of a trocar. If this does not give sufficient drainage, it will be necessary to cut down on the chest, making a free opening into the pleural cavity and introducing a large drainage tube. If this were sufficient, I should stop there, but if the drainage were not sufficient, that is if the flow of pus continued abundant, if it did not present the character of laudable pus, or if it was deficient, it would be proper to use certain injections. These should be made with two objects. In the first place, to cleanse the cavity, destroy germ life and keep the pus pure. For this purpose a weak solution of bichloride of mercury may be employed. In the second place, injections are used for the purpose of stimulation, for which there is nothing better than a weak solution of iodine. Lugol's solution diluted to about a sherry color, and gradually increased in strength, may be employed on general principles. As you find the pus becoming more and more healthy, you judge that the proper amount of stimulation is being

effected. In regard to the strength of these injections no arbitrary rules can be given, but you must be guided entirely by the effects.

Finally, if none of the methods of treatment secure the desired result, that is, the closure of this cavity and the adhesion of the granulations, then it is proper to remove a certain number of ribs. This permits the outside wall of the cavity to close down on the inside wall; that is to say, the ribs often form a stiff, unyielding wall, and the lung is often so bound down by adhesions, that it is difficult to conceive of the abscess space closing. Nature provides for healing in the following manner: the diaphragm ascends, while the adhesions draw the lung down. The granulations on the visceral pleura, as it were, catch on to the granulations on the costal pleura, so that little by little the lung edges down while the diaphragm creeps up. The external resistance is, however, present. This may be overcome by removing some of the ribs, and thus permitting the other soft parts to be approximated Portions of nine ribs have been removed. Dr. White and myself have treated four or five cases of empyema in this manner.

This treatment requires time, and as you see the measures necessary are serious; and you can now readily understand why it would not be advisable to enter upon this treatment where there was extensive phthisis.

March 18. You will observe that a drainage-tube has been introduced in the above case, since he was last before you; the pus is flowing out freely, and the case is progressing favorably.

MEDICAL SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

(*Continued from page* 398.)

There is a smaller class of phthisical patients where a more humid air is not only more grateful, but also more beneficial. To this class belong those patients having a highly sensitive nervous system, and those who are sometimes yet in the second, but more frequently in the third or last stage of the affection. A resort having a profusion of forest growth, not less than from sixty to eighty per cent., at some well-sheltered spot at low elevation in a warm or temperate climate would meet the requirements of the present group of sufferers. They are usually far advanced as regards the local lesions, and having a disease of mortal character, it would be far better, if convenient, to send them to the nearest retreat of this kind, than to advise a change to some distant resort of note, or, as is but too frequently the case, recommend the almost cruel practice of expatriation, with all its attendant inconveniences.

No attempt is here made to distinguish between all of the various forms of consumption of the lungs, and to indicate the particular resort required for their climatic treatment; on the contrary, the object is to simply sketch a general outline of the subject. Besides being useful to consumptives, the forest air, it is stated by Dr. Oswald,* relieves scirrhous affections of the skin. The same author quotes Dr. Boehm, who has observed that "ophthalmia and leprosy, which have become hereditary diseases, not only in the valley of the Nile, but in the table lands of Barca and Tripoli, are utterly unknown in the well-timbered valley of Abyssinia, though the Abyssinians live more than a hundred geographical miles nearer to the equator than their afflicted neighbors."

Since our public squares may be looked upon as forests of reduced size, it is desired to call brief attention to their effects upon the air of cities. It must be confessed that nowhere could trees and ornamental shrubbery prove their virtues to greater advantage to the public health than by improving the conditions of a vitiated city atmosphere. As in the case of forests, the action of public grounds must needs be of a local character; hence it is quite obvious that in large cities quite a number of squares of the size of those in Philadelphia, would be needed to produce the desired effect. The conclusions respecting the influence of forests upon local climate apply, with few exceptions of little importance, in the present instance. For obvious reasons, their effect in mitigating extremes of temperature, by checking the force of wind currents here, is almost negative; but the trees, by causing refreshing shade and transpiring aqueous vapor, have a delightful cooling effect, thus tending to moderate the oppressive midsummer heat of our large cities. Along with the moist vapors constantly emitted there are also other health-giving principles evolved, and among them ozone is, perhaps, the most important. Since only the flower and odoriferous foliage are ozone generating, the vegetation of these public parks should be selected with due regard to this fact. The same percentage of the total area should be assigned for retreats of this kind, as was indicated when speaking of the proper ratio of woodland for ordinary sanitary purposes, viz., twenty-five. But what city can boast of such a percentage of forest area? This would also be manifestly impossible in those portions of older cities already densely built up; but even here a nearer approach to the proper standard might be attained by the general planting of trees on either side of our thoroughfares. This latter suggestion, if carried out, would have the effect of improving the air of our streets—which is really the air we breathe—and thus by means of free ventilation a purer and wholesomer atmosphere would be admitted into our dwellings.

It is quite evident, that by providing sufficient reservations of this sort a perfect boon would be conferred upon that large element of our population, the humbler classes, who, for financial reasons, are unable to make a change of residence during the heated term. Again, such squares form a convenient substitute for a more complete change of air, in the cases of that large class of little patients suffering from infantile diseases of summer.

Who can question but that the lives savable by the maintenance of a sufficient number of these public parks could be counted by tens of thousands? For in all medical knowledge there is no fact better established than that the usual summer ailments of infants can be most successfully treated by a change of air. Than the subject of open squares and their keeping up under

*Pop. Sci. Monthly, August, 1877.

proper regulations, there is none more important, inviting the attention of our municipal law makers, and it is no exaggeration to say that any improvements they might make in this regard would be rewarded by a realizing sense of having done the greatest good to the greatest number.

DISCUSSION ON SANITARY INFLUENCES OF FOREST GROWTH.

Dr. Joseph G. Richardson said: "I have been much interested in hearing this subject, as presented by Dr. Anders. Few persons realize how much we owe to forests. Our existence itself is dependent on plants, for without their action in absorbing deleterious carbonic acid, and giving off oxygen, we would find ourselves sorely in need of this latter aerial constituent. Not only would death result from their total absence, but a reduction of plant life must affect health in various degrees. The reduction of the area of forests becomes therefore a question of great importance, from a sanitary point of view. We can readily see an illustration of this in the familiar aquarium. If there is an insufficient supply of plant-growth in these collections, the fish die. In the same way, the developed amphibioxi would die, if the plants supplied by nature were insufficient to purify the air for us.

"There are several points in the paper worthy of special mention. Dr. Anders spoke of the mechanical influence of forest belts on malaria being still *sub judice*. Believing, as I do, in the germ theory of this disease, I think the mechanical explanation of this influence is the correct one. Ozone, in quantities usually found in the atmosphere, cannot kill germs. Dr. Nicholson's investigations on this subject are still being carried on, and we can therefore expect further contributions to this subject.

"In reference to the regulation of the supply of moisture by forests, it is true that the roots are influential in drawing moisture up from great depths. This is the great advantage of forest growths; because, by the comparatively regular supply of moisture to the atmosphere, the climate is rendered more equable. This becomes of immense value in phthisis, especially when we consider the influence of great changes of humidity in this disease. Considering the vast prevalence of this disease, it becomes our duty to search out and control any obstacle to its successful management.

"The difference of plant influence on humidity, due to different investments, is of great importance. I have not, however, myself seen any advantage from the pine in phthisis, though it is conceded to exist; and I would like to hear the experience of any of those present on this subject. The idea of advantages due to dryness and altitude would perhaps be more useful if definite stages of the disease adapted to these conditions were noted. The dry climate seems best in the early stages, while the latter stages are better in a more humid atmosphere. I was glad to hear the plea for the squares in cities. Their value, especially to the poorer members of the population, is inestimable."

Dr. Henry Leffmann: "I am pleased to see this topic brought before the medical profession. The question of forest destruction has been attracting much attention in this State. The State Board of Agriculture has had several elaborate reports presented to it, during the past year or so, and the efforts of the medical profession will be a valuable assistance to the efforts made by that Board. The traveler who journeys through the mountainous regions of Pennsylvania, and sees from the car-windows the ruthless destruction of the forests, without any effort to restore them, can realize how soon the Commonwealth will be seriously at the mercy of the unfavorable conditions which result from treeless hillsides. In our own city we have a serious indirect unsanitary result, in that Schuylkill water is rendered frequently turbid by the freshets, which now replace the graduated flow of earlier years."

Dr. Shakespeare: "I have been greatly interested in the important paper read this evening, and also wish to express my gratification that this subject has been brought before the Society. One or two points struck me as perhaps leaning too much to one side of some of the questions involved, but which are yet far from settled. The views expressed by the reader on the relation of forest growth to the prevalence and virulence of malarial poison, appear to be in conflict with those recently expressed by one of Italy's most celebrated physicians at the Copenhagen Congress. My general recollection of the paper that was reported as read there by Tommasi-Crudéli, is that it contained directly opposite views, based on a study of the eucalyptus trees and the forests around the Roman Campagna. I am prompted to speak of this portion of the paper also from the fact that the general deductions do not agree with a limited experience I myself have had, both with reference to the influence upon climate and upon the existence of malaria, of the denudation of large forest areas. When I was a boy, twenty years ago, the central portion of the Maryland and Delaware peninsula, of which I can speak from personal observation, presented a forest ratio of fifty to seventy per cent. of the whole. The winters were then far longer and more severe, and the summers shorter and milder than now. Since then there has been a complete revolution in this matter. It is now a rare thing in that country to find sleighing or skating last longer than a few days, instead of months as formerly, and the summers are longer and warmer. During this climatic change, the forests have been leveled and the lands drained. The forest area has been reduced to twenty or twenty-five per cent. There has been a corresponding lessening of malaria in both prevalence and virulence. Regions that were before almost uninhabitable have become comparatively free from malaria, and where once the malignant forms prevailed, now only the lighter types are found.

"As bearing on Dr. Richardson's statement of the purifying effect of extensive forests on the air, and the deleterious effect of their destruction on the inhabitants, an inquiry might profitably be directed to a comparison of the vital statistics of France before the Revolution, with those obtained since the extensive destruction of forests which followed that period.

"With regard to the relation of forest destruction to the sanitary conditions of climate of particular localities, it might be pertinent to ask, if

the cutting down of the trees of this city and the surrounding country, and the lessening of the park area, would not sensibly lessen the aerial moisture here, thus lessening one of the attributed causes of the unfavorable effect of this climate on the prevalence and course of consumption?"

Dr. Richardson: "In connection with Dr. Shakespeare's remarks on the effect of felling forests upon malaria, the experience of the valley of the Connecticut is interesting. Fourteen years ago, malaria appeared on the southern border of the State, and advanced northward at the rate of fifteen or twenty miles a year. There was no change in the forest-covered ratio in this time. It would seem that the conditions essential to the progress of the malarial poison is not necessarily dependent on forests. Probably the element of drainage is of importance."

Dr. W. S. Forbes: "I wish to call attention to some historical facts bearing on this subject. From Charlemagne to Louis XVI., primogeniture prevailed in France. Under this condition of things large tracts of land were devoted to forests, for purposes of pleasure. Under the decree of the 10th Brumaire, the lands of the emigrant nobles were confiscated. These fell into the hands of the reigning powers, were divided up and sold, and the immense tracts of forest land turned into fields and vineyards. From that day to this, the peasant ownership, which seems impending in England, has grown with an unrestricted power of sale. Especially has this destruction of forests taken place in Provence, until twenty-five years ago so great had the evil become as to call for legislative interference. The government seized tracts of land, by right of eminent domain, and forests have been replanted. The reasons were not sanitary, but commercial: the drying up of streams and aridity of soil. On the contrary, in the northern part of France a similar course was pursued for a different purpose. That noble forest of Ardennes, or the Black Forest, which has existed since the days of Tacitus, was being desecrated and laid waste by railroads. The people complained effectually, but from hygienic reasons.

"This question of the conservation of forests has been considered by the kings of England from remote times. That laid out by William the Conqueror is to this day known as the New Forest. And this New Forest, once covering a tract of country nearly forty square miles in extent, has engaged the attention of the monarchs and governments of Great Britain from that day to this. It especially engaged the attention of that great minister of King Edward, William of Wickham, he who laid the foundation of the famous school at Winchester, which still flourishes, and that other famous seat of learning at Oxford, called New College.

"Later this New Forest attracted the attention of King Charles I., and from it this monarch constructed the ships of that great fleet, on the power of which his minister Seldon issued his famous manifesto known as the *Mare Clausum*."

Dr. Lawrence Turnbull: "With regard to the influence of trees upon malaria, it is stated that the late Dr. Dunglison taught, in his lectures on hygiene, the true sanitary value of belts of trees surrounding houses. As to high altitudes: while in the Adirondacks, last summer, I made some observations on the effects of these places on consumptives. Those in the early stages were benefited, but no good effects were produced in late stages. The therapeutical elements were not merely the pine trees, but the altitude, the latter ranging from 1800 to 2000 feet. A medical gentleman seen there had acquired phthisis in early life, had gone there to live, and remains in good health as long as he lives at the high altitude. Whenever he went down into the valley, or to New York city, his old disease returned. I was informed, by a medical gentleman, of a number of instructive cases, at least twelve, where cavities had been cured by going there in the *early* stages, and remaining there during the whole season. Cases seen, that had resorted to the localities later, had not been benefited. The influence of the pines did not seem to be of much value."

Dr. Anders, in closing the discussion, said: "I am pleased to see that the paper has elicited so much discussion. Conclusions on the subjects presented can only be correctly drawn after considering all the elements. To illustrate: at a medium altitude, fifty per cent. of forest growth would cause a slight increase of humidity; but so long as the other beneficial influences alluded to counterbalanced the objections which could be reasonably urged against the slight increase of moisture, their presence would still be advantageous. Pine forests, which I have explained exhale a much smaller amount of moisture, would not be objectionable at high altitudes, as the very slight effect upon the humidity would be more than doubly compensated for by other advantages, more particularly the power pine forests possess of generating ozone. Dr. Richardson has remarked that I did not designate the particular kinds of cases to be benefited by definite proportions of forest growth. The statements made in the paper that patients in the earlier stages of chronic phthisis should be sent to forest resorts at medium altitudes, and those in the later stages to resorts having a larger forest area, at low elevations, seem to meet these views. In regard to the remarks by Dr. Shakespeare, I did not contend for a special action of trees on malarial germs; merely that by placing them between the sources of poison and residences, its convection was arrested. The reason why malarial diseases were less prevalent in the localities referred to by Dr. Shakespeare, is probably to be found in the fact that by the removal of the forest trees, the originating centre or area of the poison was correspondingly decreased."

He also spoke of the reciprocal relations of plants and animals. According to Dumas, if all plants were annihilated, there would be enough oxygen to sustain animal life for more than ten thousand years. Pettenkofer has shown that two dozen plants are required to give off an amount of carbon dioxide at night equal to that exhaled by one baby sleeper.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Thursday evening, February 12, 1885. The President, Dr. Shakespeare, in the chair.

A Case of Cardiac (?) Aneurism.

By Joseph S. Neff.

William N——, colored, aged forty; family record good; no evidence of venereal disease. His previous history shows nothing of importance until two and one-half years ago, when he had acute inflammatory rheumatism. I could not obtain any satisfactory history of endo- or pericardial inflammation at that time. He appeared to make a good recovery, and remained well until one and one-half years ago, when he noticed palpitation of the heart and dyspnœa upon slight exertion, soon followed by cough, which was rather persistent. There was no œdema at this time, at least not sufficient to have attracted his attention. He improved upon rest and some medication received at a dispensary. After this first attack until admission to the Philadelphia Hospital he was enabled to work, although being always susceptible to palpitation and shortness of breathing upon extraordinary exertion, with one exception, which was one of his so-called attacks, and described as "catching cold," which would increase the above-named symptoms to such an extent that he was compelled to remain in the house for several weeks last August. Here, again, there was no sudden exacerbation of the symptoms alluded to.

He was admitted to the medical ward of the hospital on the 25th of November, 1884, at which time he presented the following conditions:

Orthopnœa intense, cough persistent and troublesome, accompanied by hæmoptysis, palpitation of the heart excited by moving in bed, general anasarca, skin on limbs and scrotum cracking in places from distension, deep pitting on pressure even on chest, face and forehead. Bowels constipated, urine scanty, containing $\frac{1}{10}$ of one per cent. of albumen; no casts. Pulse weak and frequent, although the peculiarity known as Corrigan's pulse was distinguishable.

Physical examination revealed marked and peculiar pulsation of the great vessels of the neck. Impulse of heart seen, disseminated over an area of about two inches. Cardiac dullness extended from upper border of third rib on left side of sternum to liver, and horizontally on a line of fifth rib, from $\frac{3}{4}$ inch to the right to $4\frac{1}{2}$ inches to the left of sternum—the apex beat being felt in the seventh interspace ($1\frac{1}{2}$ inches to the left, and $2\frac{1}{2}$ inches below the nipple).

Upon auscultation a loud blowing diastolic murmur was heard, commencing immediately below the aortic valves on a level with third rib, and transmitted downward and toward the left, being quite loud at the ensiform cartilage and apex, with its seat of greatest intensity over the left side of the sternum, on a level with the fourth costal cartilage. This murmur was not transmitted in any other direction. As to its exact time, I would state that it commenced immediately after the first sound, lasting through the second, and continuing almost through the period of rest.

A systolic murmur was also heard at the base of heart, and was transmitted towards both infraclavicular regions, and at times was heard in the carotids. It commenced with the first sound, but did not last through it. It was not heard over the body of the heart. In the region of the apex a third murmur was heard, systolic, which could be clearly separated from the preceding as being less harsh and occurring later in the systole. It was also heard over the left auricle, and as far to the left as the axillary line. Was not audible posteriorly.

Physical examination of the lungs showed a condition of passive congestion. There were no nervous phenomena excepting some slight delirium, lasting for a short time, and due to imperfect aeration of blood.

The diagnosis was undoubted aortic insufficiency, with dilated hypertrophy of left ventricle and some mitral regurgitation. Under treatment improvement commenced at once, and continued until December 11, when he was able to walk around the ward without discomfort. Cough had disappeared, no shortness of breathing or palpitation without undue exertion. Dropsy almost entirely absent. The urine still contained a trace of albumen. Physical signs of the heart were unchanged, save an impulse increased in force. Pulse was 78, strong, and retaining to a marked degree the "trip-hammer" characteristic.

The general condition remained unchanged until December 30, when it was noticed that the œdema was making headway, returning dyspnœa, etc. This gradual increase in severity of symptoms continued, and on January 5 there was considerable hæmoptysis, the physical signs being the same as on admission, excepting dullness and bronchial breathing over both bases of the lungs posteriorly. Patient gradually grew worse, and died on January 19.

Autopsy made by Dr. Shakespeare, the pathologist of the hospital, the notes of which were written by my resident, Dr. Hickman, and are as follows: External appearances; general anasarca, especially of lower extremities, most marked in the left.

Heart.—Pericardial cavity contained some serous fluid, but no evidences of pericarditis. The heart was greatly enlarged, the enlargement being principally in left ventricle.

Right ventricle contained dark clotted blood—the wall being $\frac{1}{4}$ inch in thickness, very firm, and marked post-mortem staining present. Nothing else noteworthy on this side.

Left ventricle was greatly dilated, and the wall much hypertrophied, being fully $\frac{3}{4}$ of an inch thick. The endocardium was intensely stained post-mortem. Ventricular wall was quite soft. The ascending aorta also showed intense post-mortem staining of inner lining, and the latter was in a condition of moderately extensive arteritis.

Coronary arteries appeared normal at their mouths, the right being somewhat dilated and more or less atheromatous. Mitral orifice appeared normal, also the surface of the auricle. The ventricular endocardium presented nothing noteworthy, except post-mortem staining. There were on anterior leaflets of mitral valve at base a few endocardial yellow streaks, running horizontally. At juncture of left cusp of aortic valve with ventricular cusp, there was a mass of cheesy material beneath the endocardium about $\frac{1}{2}$ inch in diameter. The mitral cusp showed a rupture through and into the pocket of the posterior cusp where the two joined; the latter cusp was also perforated in its right third, and there was an aneurismal cavity extending into upper portion

ofs eptum between the ventricles, the apex of the dilatation corresponding to the upper septum of right ventricle, the aneurismal sac showed a dilatation towards left ventricle, and a rupture into the latter by an orifice admitting the end of thumb, the upper border of the opening being formed by the two affected leaflets above-mentioned. There were some vegetations upon under surface of aortic cusp. The aneurism was the size of a walnut, and contained no clots.

Both pleural cavities contained sero-sanious fluid. No adhesions, except in one point at lower lobe. The two lobes are slightly collapsed; they presented no other abnormal appearance, except the existence of two embolic infarcts, one small wedge-shaped, size of a hazelnut, superficial near the inner edge of upper lobe at its anterior surface; pleural surface congested. Another the size of a hen's egg, projecting above the surface at the inner edge of lower and at the outer edge of upper lobe, about two inches from base of lower lobe, at its anterior aspect. The two lobes are adherent at the point of the infarct, and their substance appears to run together. The cut surface showed the infarction to be made up of tissue of both lobes, mainly of lower, and a line of division of the two lobes is quite perceptible. The area of infarct is dark red and granular, sharply outlined. At centre of the pleural surface of this large infarct there was an irregular area of reddish substance. No pleuritic adhesions with chest-wall, corresponding to this infarct, and no decided pleuritis.

The upper lobe of right side contained ten infarcts, the size of a hickory-nut, along its anterior lower edge. Middle lobe one in a similar position. Lower lobe contained four, varying in size. This lung presented nothing else abnormal.

Liver normal in size, flabby, and smooth surface. Nothing else abnormal except some congestion and probable increase of fibrous tissue, it being extremely difficult to push the finger in the cut surface.

Spleen normal in size, pulpy, dark brown in color, with slightly increased thickness of the capsule.

The kidneys were normal in size, and presented no marked unhealthy appearance, these organs being so stained post-mortem to make it impossible to judge of their condition. Amount of cortex appears normal.

The pathological change seemed to originate at the sinus of Valsalva and penetrate into the septum, then causing a bulging of the two affected aortic leaflets, making a valvular aneurism (secondary), which ruptured into left ventricle. Clinically, these cases are of little value, as none have been diagnosed, other than valvular disease. It seems quite remarkable, however, that there was no sudden onset of symptoms to mark the rupture of valves.

Dr. Tyson said that the aneurism seemed to have its origin in the sinus of Valsalva, whence it had dissected the muscular tissue of the heart towards the base of one of the leaflets of the tricuspid valves without perforating into the cavity of the right ventricle. The perforation of the semi-lunar valves of the aorta he thought secondary, for if it had exerted its force primarily in this direction, it would have perforated into the left ventricle. The origin of the infarcts does not seem at all clear. They ought, of course, to have come from the right side as they were of large size and could, therefore, hardly have come around from the left heart, though the systemic capillaries into the right heart, and thence into the lungs.

Dr. Hughes said that we might, perhaps, explain the infarctions by means of the bronchial arteries, as this was the route said to be pursued by embolus to the lungs.

Dr. Neff said that the œdema, as described, was rather remarkable; but the notes would show that there was albuminuria in addition to the enfeebled circulation and pulmonary congestion—this œdema of the *upper extremity* was not constant; as far as the infarcts were concerned, he was anatomically at a loss. In his mind they were always directly connected with the lesion in the left heart, as it was difficult to see how the necessary thrombi could originate in the right side, as the post-mortem revealed no signs of disease here, excepting the projection of the aneurismal bulging, which evidently did not interfere with the circulation. Congenital aneurism, as described by Peacock and others, were lower down, as a rule, in the undefended space, and they were rarely, if ever, the direct cause of death, unless accompanied by endocarditis. The rupture of the cusps was due to their weakened condition, dependent upon calcareous degeneration.

Dr. Tyson was much struck with the explanation given by Dr. Hughes as to the origin of the infarcts, and thought that we paid too little attention to the bronchial arteries as a factor in pulmonary infarction.

Dr. Shakespeare agreed with Dr. Hughes, and thought that Colmheim, through his celebrated study of the embolic processes, had shown that pulmonary infarction usually takes place by way of the bronchial arteries, which are, according to him, of a terminal character.

Sarcoma of Retro-Peritoneal Glands.

Presented by Dr. James Tyson.

Samuel D., a gardener aged 43, unmarried, was admitted to the Philadelphia Hospital, August 15, 1884. There was no family history of phthisis or cancer, nor has he ever had syphilis. Three years ago he had a tertian intermittent fever which lasted a week only. He thought he had injured himself by heavy lifting in June, 1884, and dated his illness to that time, although he admitted having experienced some discomfort prior to that time in the constant stooping that his occupation required of him. About July first, he noted that his feet and legs had begun to swell; also, that the swelling would partially disappear at night. At this time he also began to have, at irregular intervals, severe pain in his legs, especially the left leg. He was subject to alternate constipation and diarrhœa. This was about his condition when admitted. There was also noted a swelling immediately below the edge of the ribs on the right side, which was ascribed to enlargement of the liver, the dullness occasioned by it being directly continuous with that of the latter organ. His condition changed slowly, but gradually the tumor became more evident, and the pain in the right leg increased. He was certain when

admitted there was more pain in the left, and that at that time could not lie on the right side, while by November 20th he could rest more comfortably on that side. At this time the dullness extended in the mammillary line from the sixth rib to a line drawn transversely from a point one inch above the anterior-superior spinous process of the ilium. In the mid-axillary line the dullness extended from the ninth rib to the crest of the ilium, and posteriorly from the eleventh rib to the same point. The tumor was bounded on the left and below by a line drawn from the umbilicus to a point one inch above the anterior-superior process of the ilium, and thence obliquely to that bone. There was distinct bulging in the right flank and right lumbar region. The circumference of the abdomen through the umbilicus was 34 inches. There was greater fullness in the right flank laterally and posteriorly, and the veins over this region and the right half of the abdomen were distended. From December first he was confined to his bed, being unable to stand in consequence of what he described as weakness in his legs, especially the right; and he suffered so much pain as to require the regular administration of morphine. The circumference through the umbilicus was 36 inches. The sulcus at the border of the ribs had become more marked. There was at no time jaundice, and while he gradually emaciated, there was no cachexia.

(To be continued.)

EDITORIAL DEPARTMENT.

PERISCOPE.

Incontinence of Urine in Children.

Dr. Samuel S. Adams, of Washington, D. C., publishes a very interesting paper on this subject in the *Jour. Am. Med. Ass.*, January 3, 1885, from which we make the following extracts. After stating that he considers the condition a disease and not a vicious habit, as so many parents seem to think, he goes on to say:

We generally find the disease divided into three varieties. In the first class, the subjects suffer from a constant dribbling of the urine day and night. This variety is infrequent, and when found, it is usually associated with some serious pathological state. I have met with but two cases of this kind, in boys about eight years of age who for several years had been unable to retain their water. Examination revealed a vesical calculus in each case, which being removed, the function of the bladder became normal.

A second class comprises those whose incontinence is intermittent in character, and occurs in the day as well as at night. We find that in this class the urine is retained for a short time during the day when the desire to void comes, but before the child reaches a convenient place the sphincter is overcome, and the poor child is powerless to stop the flow. This is the form usually met with in the girl. In fact, the histories of those I have seen have been that the girls would suddenly be taken with a desire to urinate, while in school or on the street, but before they could reach a closet the power of control gave way. The cause in these cases was found to be vulvitis or urethritis, as a result of the irritation from ascarides in the vagina.

But the third class is the one that interests us most because of its frequency in both sexes, its nocturnal character, its possible concealment for years, and the promptness with which it yields to treatment. It is the children of this class who are so frequently punished for bed-wetting when they are as powerless to control the sphincter during the night as are those of the two preceding classes during the day. They may, and usually do, urinate before retiring; and yet, about midnight, during a profound sleep, the urine is passed again; or it may be that the night is passed without the accident, but just before rising in the morning the contents of a full bladder are involuntarily set free. Patients of this class generally dream of urinating. In the boys of this class urination takes place during erection of the penis. Again, we meet with cases where the cause is obscure, but, nevertheless, the nocturnal incontinence occasionally takes place. In these patients I attribute the accident to causes that favor a perfectly physiological process in the adult. We well know that late suppers, rich food, wines, certain positions during repose, profound sleep, amorous or lascivious dreams, and many such cases, produce a nocturnal pollution in the adult, and I am convinced that the same causes excite a similar irritation in the child, but instead of the seminal discharge, the physiological process of which is not yet established, the bladder is emptied. In each instance the discharge is the result of a conservative process of nature to relieve the irritation. Indeed, this theory seems the more plausible because in many instances the nocturnal bed-wetting goes on undisturbed until the full establishment of the sexual functions, when the enuresis is superseded by nocturnal pollutions. This theory is also tenable because most of the remedies which cure the adult of his complaint very quickly relieve the child of its.

To determine the pathological condition is not always an easy matter. Atony of the sphincter vesicæ, or spasm of the detrusor urinæ may be the cause. The controlling power over the sphincter, which is largely reflex, may, by the influence of the will, prevent the escape of urine during the day, but at night, when the will is asleep, this power is relaxed, and the consequence is involuntary micturition regardless of cerebration.

As I do not admit that incontinence is frequently the offshoot of fear or laziness, of course I hold that moral suasion and corporal punishment are not efficient correctives, and equally of course I contend that in most cases the indicated procedure is either remedial or operative.

It would be more interesting than instructive to examine the literature of the internal remedies which have been successful in these cases. Nearly every drug in the materia medica has been tried with equal success, if we are to credit the books. Drugs physiologically and chemically incompatible have been combined and success claimed for them. Accepting the theory of a want of tonicity in the muscular walls of the bladder, some have used remedies that should have aggravated the trouble, and yet have claimed a perfect cure. In such cases the results were probably accidental, and most likely were brought about by nature in spite of the treatment.

Leonardi and others extol chloral, but others have failed to derive any benefit from its use. It acts by allaying the reflex irritability in the cord. I do not approve of the use of this drug with children, certainly not except with the utmost caution. Owing to the variability in strength of the preparation, and the uncertainty of its physiological action, as well as the individual idiosyncrasies, it must, in my opinion, be regarded as one of the most dangerous and uncertain remedies in common use.

The bromides take foremost rank in the treatment of those cases in which an exalted nervous condition can alone account for the incontinence. They should be given in large doses at bedtime.

But belladonna is the remedy *par excellence* in the treatment of those cases believed to be associated with a tonic spasm of the bladder. One of its physiological actions is to relax the tonic contraction of the involuntary muscular fibres. The muscles of the bladder being of this class, when the atropia in the urine comes in contact with the walls of the bladder it allays irritability and relaxes spasm. In order to derive benefit from the drug it should be given in large doses at bedtime, which should be increased, drop by drop, daily, until improvement results or its physiological effects are obtained. It must be borne in mind that children will bear much larger proportional doses than adults. I speak in the highest terms of this drug because, as will be seen from the foregoing cases, it alone produced beneficial results in about four weeks.*

If there is a relaxation of the sphincter vesicæ or paresis of the muscles of the bladder, strychnia is indicated. But as I have never seen a case of this kind, I have had no experience with it.

If the patients are puny or in ill health, we would naturally expect better results by improving the general health while we are administering remedies.

Experience has taught me that the best success attends those patients who are treated in hospitals. In these institutions the diet of the child can be regulated, and many advantages gained in treatment. Parents will insist and believe that the physician's instructions are carried out in full; but they forget the sympathizing friends about the house who think the child unduly restricted, and who are, therefore, willing and ready to cater to its whims. For this reason it has been my custom to advise children to be placed in the hospital. If the patient can be fully controlled, success will quickly attend the treatment indicated.

In order to make statistics of operative procedures valuable, the use of remedies should be suspended. If we operate, then the operation should stand upon its own merits, and not be embarrassed by drugs. After a circumcision, if belladonna is given how can we tell which means effected a cure? In the cases above reported as operated on, nothing but soporifics were given.

I do not advocate circumcision as the certainly indicated remedy in all cases, nor do I believe that every boy who has incontinence, with an elongated prepuce, should be compelled to undergo the operation. If the prepuce cannot be retracted, then I would advise operating; and while sometimes the opening in the prepuce is large enough, yet it cannot be retracted owing to adhesions. In such cases, if these adhesions are broken up favorable results will follow.

I prefer to perform the operation of circumcision in the following manner: The prepuce is drawn forward, and Henry's clamp tightly applied; the end of the prepuce is then cut off with scissors, and the clamp left on the stump for several minutes to check bleeding; a director is then pushed along the upper surface of the glans, and the mucous membrane divided beyond the corona. The membrane is then turned back to meet the retracted skin, and made fast by five silk sutures. In about ten days the patient is well. I remove only that part of the mucous membrane that is cut off with the end of the prepuce; for by leaving a long membrane it can be turned back and thereby hide the cicatrix, which is a source of mortification to many parents. In cases 8, 15, and 16, there is nothing to attract the attention to circumcised organs. One objection to the operation is that the glans will be left uncovered, and that it destroys to some extent the sensitiveness of the organ. If this were true it would in many cases prove a great blessing, but, unfortunately, it is not true. Another objection is that the beauty of the organ is destroyed, whereas, in fact, if the circumcision is neatly done the penis presents a far better appearance than it does with a redundant foreskin.

From the foregoing cases, which have invariably been attended with complete success, without the administration of a drop of medicine, is it to be wondered at that I so strongly favor circumcision?

Some have advised forcibly stretching the contracted prepuce—a process both tedious and unsatisfactory.

Teevan, a British writer, advocates slitting the meatus, which he thinks is too small in most children with incontinence. As I have not seen any cases requiring the operation, I must accept his statement that benefit was derived from it.

There is one other kind of treatment discussed and recommended in the books, that may be called the mechanical.

Many here present, I dare say, have been called to treat an œdematous prepuce caused by tying a string around the penis to prevent bed-wetting. Perhaps some little fellow, after frequent thrashings, has finally, in sheer desperation, conceived

*In all of Dr. Busey's cases the belladonna was given at night, and increased, drop by drop, daily, until the desired effect was produced.

the idea of eluding the lash by tying up the escape-pipe. He may have missed the chastisement, but he paid dearly for the immunity.

Corrigan, apparently a writer of note in Great Britain, deliberately and strongly advocates hermetically sealing the prepuce with collodion. He stretches the prepuce and forms a pouch, into which the collodion is poured, solidifies, and thereby prevents the escape of urine!

Compression of the membranous portion of the urethra by a pad, and packing the vagina, have also enthusiastic devotees!

Knotted towels, spiked belts, and other uncomfortable rigging to prevent the child from lying on its back, have also received their share of commendation.

It seems hardly necessary to comment on these various mechanical methods of treatment, since they seem to evince a hopeless ignorance of the etiology of the disease, and are not only valueless, but actually harmful.

Recovery from Traumatic Tetanus.

Dr. James Murphy reports the following case in the *Lancet*, February 28, 1885:

J. S——, a lad aged fifteen, was admitted on September 24, under my care, with well-marked symptoms of acute tetanus. The following history was obtained: Twenty days previous to admission the terminal phalanx of his left thumb had been severely crushed and bled freely, but there was no fracture of the bone. He was treated by Dr. Shelley with an astringent lotion, but the wound showed no signs of healing, and after a week presented a very foul greyish appearance, as if a fungus were growing on it. During this time he felt well, and was running about, but four days previous to admission he felt very languid, and had a general feeling of malaise, which was soon followed by stiffness of the muscles of mastication and of the face generally and of the neck. This condition rapidly spread to the muscles of the limbs and trunk, and when admitted the risus sardonicus was particularly well marked, the under jaw protruding and fixed, so that the tongue, which was thickly coated, could but with difficulty be passed between the teeth. The muscles of the trunk and limbs were very rigid, and opisthotonos well marked, the lad resting on his heels and occiput, and every few minutes a violent and characteristic spasm of the voluntary muscles would seize him, which would soon cease completely and leave him perfectly still. These attacks would sometimes be delayed as long as half an hour if nothing disturbed him, but the opening of a door, or speaking to him, brought them on at once. On placing the hand on his abdomen, it felt like a board. His wrists and ankles were quite movable, and were not affected at any period of the attack. He complained of great pain in his thighs, similar, but much more severe in character, to ordinary cramps. His pupils were normal; his eyes generally closed. He never spoke except when asked a question, and then replied as laconically as possible. His intellect was quite clear, and his temperature 100°. He was at once given a calomel and jalap purge, as his bowels had not been open for several days, and placed in a small private ward, which was regularly kept at a temperature of 65°, and though there was no apparent draught, the bed was carefully surrounded by large screens, and he was placed on twenty grains of chloral and thirty of bromide of potassium, to be administered every three hours, day and night. What milk he could swallow, with great difficulty, was allowed him, and he had nutrient enemata of beef-tea and eggs. The whole of the terminal phalanx of the injured thumb was amputated shortly after his admission. Within twenty-four hours the spasms had ceased very considerably, and now only recurred at an interval of an hour or two, and were much less severe in character. The temperature sank to normal. The case progressed day by day to complete recovery about the twentieth day after admission. The progress towards recovery was well marked during the first forty-eight hours, after which the symptoms were but slight, and gradually passed away. First the spasms disappeared, then he could open his mouth a little more, next the pain in the thighs was not so distressing; the opisthotonos became less marked; then the risus sardonicus slowly faded away; the rigidity disappeared, and he completely recovered; the temperature having varied from 101° to 96° without any apparent cause. The amputated phalanx was examined, but without any definite result.

Dr. Murphy attributes the satisfactory result not to any one part of the treatment, but to the whole of it. First, the removal of the irritating wound, then the free use of chloral and bromide of potassium, to control the spasms, which he regards as of great consequence so as to guard against the consequent exhaustion, and for the same reason the isolation of the patient in a small private ward, where the temperature was kept at 65° without varying, and the bed carefully protected from all draught by large screens, and, finally, the judicious administration of plenty of nourishing food by mouth and rectum.

Arthropathia Progressiva.

Dr. Allan McLane Hamilton thus writes in the *N. Y. Med. Jour.*. January 24, 1885:

It is my purpose to call attention to what I believe to be a new form of arthritic disease of nervous origin—a symmetrical arthropathy of a distinctly progressive nature and of slow development. Irregularly distributed joint affections are not uncommon in connection with some forms of cerebral and spinal degeneration—with certain varieties of hemiplegia, with secondary degeneration of the crossed pyramidal columns, and with sclerosis of the posterior columns of the cord. In such instances we find that the knee or the hip-joint is the common seat of trouble, and it is rare to discover that more than one articulation is involved to any decided degree.

I have never discovered anything like regularity in the invasion of the arthropathy, nor any special selection of joints, until I examined a patient, Mrs. T., who came to me at the request of Dr. Agar, of Middletown, N. Y.

The patient is a married woman, forty years old, who has had no children nor miscarriages. Her family history is good. She has never had

syphilis, and there is no history whatever of rheumatism in the ordinary sense of the word. About fourteen months ago she first noticed that her ankles became swollen, the outside of the left ankle being puffed. This was unattended by much tenderness, but there were shooting or darting pains running up the leg. This swelling, which was apparently œdematous though hard, disappeared at the end of two months, leaving a slight prominence. About ten months ago her attention was directed to the stiffness of her two forefingers, accompanied by some swelling upon their palmar aspects, which was very great, and at the same time the joints became swollen. The little fingers were next implicated, and afterward the other fingers more or less. Latterly both thumbs have become involved, and are now much swollen, especially upon their palmar aspects, and the œdema of the fingers has in most part subsided. Last winter the right shoulder joint became stiff, and the seat of sharp pains. There is very little soreness and tenderness of the affected joints, which is slightly aggravated by movement. She also has sharp pains in the biceps humeri of the left arm, and upon the outer sides of both forearms, in the left wrist, and under the left knee. There is no spinal pain and no plantar anæsthesia. Her gait is slightly ataxic, and she is clumsy in all her movements. There is a loss of muscular power—hardly a decided paresis—but the feebleness which belongs to myxœdema. She flexes her fingers only to a limited extent, and then only with great difficulty, and she has more control over the ring-finger than any of the others. Her condition is affected in no way by changes in temperature or errors in diet, and exercise does not materially increase the little pain she has. Her urine is free from albumen and casts, and does not show any excess of uric acid, sugar, or inorganic constituents. It is, as a rule, clear, and passed in large quantities. Her vision is quite decidedly impaired, and her accommodation is defective. There is some white atrophy of both optic nerves. The left pupil is slightly smaller than the right. Her tongue is large and flabby, but there is little thyroidal enlargement, no atrophy, no loss of hair, and no flushing whatever. Heart normal. Speech unaffected. Left reflexes all exaggerated to some degree, especially the left rotulian reflex.

Her inability to flex her fingers is largely due to a mechanical difficulty, though, as I have said, there is some flexor weakness.

I do not think these symptoms can be confounded with those of any other disease—certainly not with *arthritis deformans*, a case of which somewhat resembling that of Mrs. T. was recently reported by Dr. Leonard Weber. There is here no history whatever of the rheumatic influence, but ample associated evidence of some profound disorder of the central nervous system. My experience has led me to look for arthropathies with degeneration, especially of the sensory tracts, and in the cerebral cases of the form first described by Allison, and afterward by Charcot, and a host of other observers, a history of pain is the rule. There can be no doubt of this connection in locomotor ataxia.

In Mrs. T.'s case we are furnished with four important symptoms of that somewhat rare disease known as myxœdema—the enlarged tongue, the pseudo-paresis, the pains, and the sclerodema—and the unilateral contraction of the pupil may be added. The history of so many negative symptoms, and the fact that the face was in no way affected, would do away with any possible misunderstanding.

Certain French writers, among them Arnozan,* speak of a limited œdema of nervous origin, and Mayet† has, in a case of fracture of the vertebræ, found an œdema limited to the exact regions which were anæsthetic.

According to Arnozan and others, the œdema begins suddenly with the arthropathies, and disappears gradually during their evolution, which was the case in my patient, and which I believe to be one of the points in the differentiation of those arthropathies which are of neurotic origin from others which are purely the local expression of the rheumatic condition.

Cerebral Pathology.

The *Lancet*, January 17, 1885, says:

At the last meeting of the Clinical Society a paper was read by Dr. Hale White, on lesions of the frontal lobes. It is a matter of surprise, considering the freedom with which such questions have been discussed, that so much yet remains to be learnt. Has it not been accepted as a fact for some time past that injury to or disease of one of the frontal lobes is unattended with important damage of the ordinary functions of mental life? Whether this absence of symptoms is due to insufficiency of examination or not seems to be a matter worthy of consideration. Another possible view of the case is to suppose that in the recorded cases the individuals injured in the frontal regions have not been of the educated sort, and that as a consequence the functions which should have been present have never been developed. It seems certain that this kind of explanation would hold good for many cases of absence of symptoms when we have to deal with infants and others whose mental powers have not yet appeared, for the all-sufficient reason that the structures which entitle them to the possession of the faculties are then in an immature condition. Moreover, it would appear that Hartley's time-honored distinction between volitional and automatic actions is greatly in danger of being forgotten, or at least of being misunderstood. We should have thought that no one would have cavilled at Mr. V. Horsley's statement that the drawing of a triangular outline with one hand whilst the other was describing a circle was an impossible performance of consciousness. Consciousness is single and undivided, as best seen in close attention. But there are such processes as may safely be called sub-conscious, or almost unconscious, and amongst these must be classed the performances of telegraph clerks, weavers, and interpreters of music, whether of the Chopin order or not. It is not uninteresting to consider how far education would be possible in the absence of that most important principle which shows that volitional acts do, after a series of per-

*Des lésions trophiques, Paris, 1880.

†Gazette Méd. de Lyon, 1868.

formances, become automatous, requiring very little or almost no guidance from the highest intellectual centres. The last meeting of the Clinical Society might not unreasonably be called a psychological evening, for both Dr. Hale White and Mr. Victor Horsley made the paper which the former read the occasion for some general remarks on the psychological functions of the cerebral cortex, if such a mode of expression, where mind and matter are confused together, be allowed. The latter gentleman is a supporter of the view that the highest intellectual functions are mostly energized from the hinder portions of the brain, whilst the frontal regions are the special seats of the highest emotional faculties, including, as we understood him, the power of giving expression to these. The lines of Hamlet, "See what a grace was seated on this brow; Hyperion's curls; the front of Jove himself!" would on this showing not be testimony to the intellectual faculties of the Queen of Denmark's first consort. However, the time has not yet arrived when we can speak with certainty on such matters, though it is clear from Prof. Ferrier's experiments and many clinical observations that the perceptive functions associated with the most intellectual organs of sense, the visual and auditory, are represented in the posterior regions of the cerebral hemisperes. The view which Dr. Hale White propounded with regard to the most recently acquired faculties as having no very definite site in the cerebral cortex, so that either frontal lobe may assume the functions of the other, would appear to have some kind of connection with the views of evolution and dissolution as propounded by Dr. Hughlings Jackson. Though it is usually taught that function precedes structure, yet there are many considerations which lend support to the notion that these elements go hand in hand. On this view it is not difficult to understand how, so to speak, virgin brain soil may be made by education to perform any functions whatsoever. True it is that through a long series of ages certain specializations have already been effected, and the development of the individual must on the laws of evolution proceed along the lines which heredity has laid down—that ontogenesis must be rapid phylogenesis. But, potent as are the influences of untold generations of experience, still the present agencies are in a measure, perhaps, more powerful.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——The literature of cocaine is rapidly increasing. A monograph of 88 pages is before us by Dr. H. Knapp, with supplementary contributions by Drs. F. H. Bosworth, R. J. Hall, E. L. Keyes, and Wm. M. Polk, which illustrates the use of the drug not only in surgery of the eye, but in many other applications. It is highly suggestive, and should have the attention of all who are studying the action of this novel product. (New York: G. P. Putnam's Sons.) Another reprint on the value of cocaine as a local anæsthetic to the nasal, aural, and conjunctival membrane, is by Dr. J. A. Stucky, of Louisville. He observes:

"In four cases I was unable to obtain any appreciable anæsthesia of the parts to which the remedy was applied. The cause of this I am inclined to attribute to the solution used, or perhaps to the improper or ineffectual application of the remedy. Certainly the results already attained are sufficient to make us feel that our 'fondest hopes,' in the way of local anæsthesia, 'have been realized.'"

——Owing to the liberality of Mr. George S. Davis, of Detroit, the *Index Medicus* will be continued. That gentleman, with an enlightened appreciation of the higher branches of science only too rare among business men, has undertaken to continue the publication of the *Index Medicus*, on the same general plan, and with the same regard to typographical accuracy and finish, as heretofore. On account of the delay required to perfect this arrangement, the first number of the journal for the current year will comprise the literature of January, February, and March, after which it will appear monthly, as usual. At the end of the year, in addition to the usual annual index of names, subscribers will be furnished with an index of subjects to the volume. Address, *Index Medicus*, Washington, D. C.

BOOK NOTICES.

De l' Aphasie, et de Ses Diverses Formes. Par le Dr. Bernard. 1 vol. 8vo., pp. 271. Illustrated. Price, 4 fr. Paris, A. de la Haye et Cie.

"The Disorders of Intellectual Expression" would have been a more appropriate title of this work, as it is by no means confined to the ordinary limits of aphasia. After several introductory chapters, in which the author treats of the definition and history of disease, of the nature of language and its physiological seat, he explains the various forms of the disease, their origins and relations, and includes in his view agraphia, or the inability to use written language. Complex aphasias are then considered, and a chapter is devoted to the consideration of the medico-legal bearings of many of the facts he has set forth. We can commend the monograph as an excellent one.

—Dietrich's proverbial philosophy: "Dietrich, your father-in-law is very low," said the physician. "I think he will hardly live through the night." "Ach, well," says Dietrich, "dot was all right. De better he is dead de quicker he is off."

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THE WATER SUPPLY OF PHILADELPHIA.

For years it has been well known, and fully recognized by all thinking and intelligent persons, that the water supply of this great city was gradually becoming so contaminated, so unfit for use, so *rotten*, that a remedy was imperatively demanded. Unfortunately, the thinking people have taken it all out in thinking; *action* seemed to be beyond their comprehension; talk, which is cheap, has been indulged in, but no improvement has been made.

On Monday evening last, Colonel William Ludlow, the able, and we might say, *too* efficient chief of the Water Department (*too* efficient, because his recommendations are *too* intelligent to be appreciated by the grovelling minds that make up the greater part of our councils), delivered a lecture on the "Water Supply of Philadelphia," before an appreciative audience, in the hall of the County Medical Society. Colonel Ludlow is a forcible speaker, and his acquantance with his subject is absolutely perfect. Any one who listened to his instructive lecture must have gone away thoroughly impressed with the idea that the last syllable in the name of our water supply (Schuyl*kill*) has more truth than poetry in it.

Colonel Ludlow tells us that the Schuylkill drains a valley which contains a total population of about 350,000 souls. Just think of it; we in Philadelphia drink this water, after it has received daily the fæces and urine of 350,000 persons.

The idea that water purifies itself we have before combated, and we are glad to see that so distinguished an authority as Colonel Ludlow supports us in this view. To a certain extent, this will occur; a flowing stream exposed to the air will by the action of the atmosphere have some of its poisonous nitrogenous compounds oxydized; but to suppose that a stream so thoroughly polluted as our Schuylkill must be when it reaches us, can possibly on its way to us be sufficiently purified by atmospheric influences as to render it *fit to drink*, is so preposterous as to be unworthy of consideration.

Colonel Ludlow startled his audience by saying

that there were no less than four sewers, over two miles long, that have been for generations pouring their foul fluids into the pool which contains the greater part of the city's water supply, and thus nine hundred thousand or one million people were constantly endangered by the drainage and waste of seven or eight thousand people in Manayunk. Should an epidemic break out in that place or at the Falls of Schuylkill, or among the mill hands along the river, the results might be horrible to contemplate. During the past year steps have been taken to obtain better drainage, but the force of inertia and selfish resistance is hard to overcome. In January last, Councils instructed the Water Department to warn persons who were polluting the river at Manayunk and elsewhere to cease throwing their refuse into the stream. The department did warn them, but out of one hundred and fifty cases of that kind reported, only two had been properly attended to. Is not this apathy horrible to contemplate?

But still worse; Colonel Ludlow has himself been asked by men who had received warning to withdraw the warning; but, to his honor be it said, he refused peremptorily to do do so. *But*, and this is a very big BUT, worthy of most serious attention and condemnation, Councils propose to *instruct* him to withdraw these warnings. We can only account for this proposed action on the supposition (that has become almost a recognized fact) that councilmen drink very little *undiluted* water.

Colonel Ludlow declared that there were thousands of polluted wells in use in the city, and that two thousand had been already complained of to the Board of Health. The water of these wells was clear and bright and sparkling, but it was not always the clearest water that was the purest. A gentleman on Walnut street, disgusted with the Schuylkill supply, sank a well under his own premises. He struck pure, bright water eighty feet down. At the Colonel's earnest request he submitted some of this water to a chemist and the report was: "The water is not fit for boiler use, and for drinking purposes it is poisonous." What are we to think of wells sunk into a soil impregnated with the drainage of generations?

Is it not incredible that the people of a large city like Philadelphia will submit to such outrages? No, it is not incredible, because it is a fact that they do; and why?

We have in the centre of our *town* a huge, deformed white elephant, that has already cost the citizens of this hygienically-blind city *fifteen million dollars;* we do not need it, and the majority of our *best* citizens did not want it; but there was a *job* in it, and so it has gone on; and by a strange coincidence, this *abortion* of architecture stands on the very site of the old water works of the *village* of Philadelphia. We could raise money enough to build this monstrosity, which is neither necessary nor ornamental; but when we talk about a pure water supply, we are answered that it will cost too much. For the sake of common sense, let us look this matter in the face, and do not longer tolerate this *un*masterly inactivity.

It has been very truly said that "any fool can find fault, but that is takes a wise man to find a remedy," and this proverbial sentence has been repeatedly flaunted in the faces of those who complain of existing institutions. But in this instance Colonel Ludlow is the Solomon who has found the remedy, but our Councils and our people are the unfortunates who prefer to wallow in the mire rather than follow the leadership of an intelligent and capable leader. The sanitary darkness of old Egypt is no greater than that of the city that was *once* noted in our geographies as the *cleanest* city of the country. Those who desire to see an illustration of Egyptian filth, a representation of the cholera-beds of Toulon, Marseilles, and Naples, have but to go into our courts and alleys (our main streets are bad enough, but they are comparatively respectable), and if their sense of all that pertains to hygiene is not aroused, then they are truly blunted to all the details of self-preservation.

To return from our digression, we say that Colonel Ludlow has suggested the remedy.

He realizes that Rome would never have been the Mistress of the World if she had supplied her citizens with drinking-water from the muddy, germ-ridden, and stinking *Tiber;* he knows that our old Roman friends realized the importance of hygiene much more than do our degenerate companions of to-day; he knows that while Greece cultivated her athletic sports, Rome (determined to conquer the world) thought more about good organic health than of extraordinary muscular development (which by no means implies good organic health), and he knows that one of her first thoughts was to give her citizens *good water* to drink.

Hence she went off miles into the country and built those marvellous aqueducts, the ruins of which the visitor to Rome now sees striding, like giants, the lonely Campagna, reminding one forcibly of the foresight and *common sense* of the rulers of the WORLD.

He, unlike most of his brother officials, is a well-read man; he has thoroughly studied his subject; he knows all about *water*, and he suggests that we, of Philadelphia, shall profit by the example of the past. He proposes (and would that it could become an immediate reality) that we, like Rome, shall derive our water from a remote source, beyond the *possibility* of present, and the *probability* of future contamination. He tells us that we can derive a most bountiful supply of the purest water from the Delaware River, at Point Pleasant, about thirty miles from the city, and that the necessary aqueduct and works can be built for about $7,500,000, and completed in three years from their inception.

Let us heed his words well; he knows whereof he speaks. When cholera visits us this summer (if it does) we will be panic-stricken; we will ask why did not the authorities take measures to prevent this invasion?

Let us remember that *we* are so apathetic in all that pertains to health that we cannot expect our authorities to be otherwise. Let us remember that *good water* is absolutely essential to *good health*, and let us give Colonel Ludlow all the aid we possibly can in his good work.

THE PREVENTION OF EPIDEMICS.

In these microbic days, our attention is constantly called, in a much more scientific way than formerly, to the question of the prevention of epidemics. We were wont to endeavor to ward off the entrance of disease by what might be called, in the view of modern science, *empirical* methods. Whether we really will accomplish any more practical results from the scientific medical aspect of the age, is a question for the future to determine.

The profession, as a whole, by no means accepts the scientific views of medicine of to-day, and many of them doubt very much whether we have made any *real* advances. This was amusingly and strikingly illustrated recently in this city, when Dr. E. O. Shakespeare, a student of both Koch and Klein, delivered a lecture on "Cholera," under the auspices of the "Committee on Hygiene, and the Relations of the Profession to the Public." He, of course, is naturally a firm believer in the "*comma bacillus*" etiology of cholera, and he rather plainly intimated as much, though he was neither aggressive nor dogmatic in his assertions. When he finished his lecture, the venerable Dr. Nebinger spoke for some time, the burden of his remarks being that we know no more *practically* about cholera to-day than we did in 1849.

Judge Pierce then informed the audience that, in his belief, during an epidemic of cholera, more persons died from *fright* than from *cholera*. He related a repeatable story about the Plague meeting an angel when crossing the desert. To the question of where he was going, the Plague replied that he was going to kill 5,000 persons. Sometime later, these two met again. The angel said, "You told me you were only going to kill 5,000 persons, but 10,000 have died." The *Plague* replied, "I did only *kill* 5,000; the other 5,000 died of *fright*."

While there is much truth in Judge Pierce's good story; while there can be but little doubt that fright, in times of epidemics, and at all times, for that matter, has an injurious influence: while we have not yet, and possibly never will

entirely and universally accept these beautiful scientific pseudo-facts, yet it is well that we should read about them, and learn how they influence the thought of our day.

Dr. Ezra M. Hunt, of New Jersey, is a man who is thoroughly cautious and prudent: he is not carried away, neither is he blindly held back. At the last meeting of the British Medical Association, he read a paper bearing the title of our editorial, the conclusions of which we give as possessing sound common sense:

1. In the study of the *contagium vivum*, we are to recognize not only change from culture or attenuation, but, as in plant life and animal life, to recognize manifold changes which may take place, so discursive as to obscure identity, and so as to make what, in pathology and treatment, may be a new disease, without involving the doctrine of spontaneous generation.

2. We must give significance to the effect of imparting a disease to the system by channels or modes of introduction different from what may be called its normal method of entrance, and allow for modification of effect from this cause, without any real attenuation.

3. We must study closely, not only the general effects of surroundings, but the fertilization or rankness which certain diseases attain from a compost especially adapted to them.

4. We need, with the same precision, and in a similar direction, to ascertain what are the conditions of individuals who furnish in themselves extraordinary soil for communicable diseases, or who withstand seizure amid exposure, or have but a mild attack, and to recognize that there are ascertainable reasons for this difference, a definite law of susceptibility.

5. We need to give great prominence to a study of direct prophylactic methods, and such as shall seek, during exposure or the prevalence of an epidemic, to prevent an attack, by imparting to the blood and tissues the presence of such substance as shall prevent those changes which an introduced morbific agent would otherwise set up.

Notes and Comments.

Measles Complicating Pregnancy and Parturition.

Dr. Angus Macdonald thus writes in the *Edinburgh Med. Jour.*, February, 1885:

Mrs. Y., æt. 26, I^a^, residing in Edinburgh, and expecting her confinement on the 22d of June, 1884, had the misfortune to have measles in her house in the month of May, a little step-son having caught the disorder. This patient was assiduously watched by her for a couple of days until the measles appeared. The lady herself was not aware of having had measles herself. She accordingly was at once removed to another floor of the house, and on the following day to rooms in a part of the city distant from her home one and one-half miles.

June 5. A full fortnight after removal she had some sore throat and sneezing, and along with these symptoms the rash of measles appeared on her skin. Her morning temperature was 99.6°, her evening 102°.

June 6. The measles are very well out all over the body. Slight cough. Temperature as on the previous day. During the night the patient complained of some pains in the back.

June 7. At morning visit the cavity of the cervix was found completely dilated, and the outer os about the size of a shilling, the child's head being pressed against it, covered with a thin layer of water. The morning temperature was 99.5°, the evening 100.2°. In the course of the night, labor became fully established.

June 8. At 5:25 a. m. the patient was delivered of a healthy female child. During the delivery she complained of a distressing feeling of weakness, and of a sensation of faintness. The pulse was quick and small. Some chloroform was given during the second stage, which was easy, and did not last over two hours. There was smart post-partum hemorrhage, which was checked by the exhibiton of ergotin under the skin before the placenta was removed, and by kneading the uterus. The temperature shortly after the delivery was subnormal. Brandy had to be repeatedly administered after delivery to check the feeling of faintness and sickness. In the evening the temperature rose to 100.2°. The patient made an uninterruptedly good recovery, the temperature never afterwards reaching over 100°. The milk appeared naturally, and the entire puerperium exhibited nothing to be specially remarked upon.

About the end of the first week of life the baby showed a distinct punctuated rash, which may or may not have been measles, but which was unaccompanied by any rise in temperature or pulse.

After the scholarly contribution and masterly analysis of cases of this complication lately brought to the notice of the Society by Dr. Underhill, it is quite unnecessary for me to go back on the literature of the subject, further than to

refer the members of the Society to that paper. As cases of this kind are, however, so very rare, it is incumbent upon all members to record them for the public benefit.

It will be noticed from the above record that the case was, on the whole, a very mild one, and was free from any chest complication. But all the same, it was evident that the labor was precipitated by the fever, as the 22d of June was the earliest date on which, by careful analysis, we had calculated the labor would come on, whereas it supervened on the third day after the appearance of the rash, or what would be the seventh day of the fever, although this was sixteen days before the period of expected delivery. It is also noticed that the double demand upon the patient's strength made by the fever and the labor was specially marked in its power of inducing depression. The complaint of excessive weakness made both before and after the administration of chloroform were exceedingly unusual.

Being aware of the special tendency to hemorrhage determined by measles, I had the ergotin ready in the syringe, for use the moment the child's head was born. I had forceps ready also in case the second stage was unduly or unsafely prolonged. But I did not need to use the latter. There was no bleeding before the birth of the child, or any other evidence to indicate hemorrhagic endometritis properly so called. But there was certainly a special tendency to post-partum hemorrhage, which might have led to serious consequences had it not been checked by the injection of ergotine.

From a consideration of this case, and, indeed, from a review of the whole matter, it appears to me that measles are not to be dreaded so much in connection with pregnancy as we have hitherto considered them. Such of us as were trained by Sir James Y. Simpson—and his pupils still form a large proportion of this Society—have framed our ideas of measles in connection with pregnancy rather too closely on the type of the case he used to relate to us. That particular case assumed the form of intense septicæmia. I am not perfectly satisfied that the case was one of measles, as no rash came out, and the evidence from the child's having ultimately exhibited a measly rash can hardly count for much, considering the frequency with which infants suffer from such rashes where there is no possibility of infection. At any rate, from the two cases which have come under my own knowledge, there is no evidence to indicate that the measles poison tends to act as a general septic influence in pregnancy or in the puerperium.

It appears to me that measles are dangerous in pregnancy and the lying-in period—

1. Because they have an undoubted tendency to produce abortion.

2. Because they are associated with a tendency to pulmonary inflammation.

3. Since the delivery, if it supervenes, is undergone when the patient is already weakened by fever, it is peculiarly liable to weaken and exhaust the patient.

4. Because measles have an undoubted tendency to induce hemorrhagic endometritis.

Provided, however, chest complications are absent, or moderately developed, the delivery is completed by the natural efforts, or by aid of art. Before the condition of exhaustion becomes dangerous, and the hemorrhagic tendency is in abeyance, it does not appear that measles need be looked upon as a complication of pregnancy or of parturition that should cause especial alarm.

Treatment of Septicæmia by Ammonia and Chlorate of Potash.

The treatment of septicæmia by these remedies is sufficiently unusual to warrant the report of the case which Dr. Maitland Coffin records in the *Lancet*, January 19, 1885, wherein he says:

"On October 9, I was sent for to see Mr. T——. I found him very ill with erysipelas: and waited on by his wife, who was expecting her confinement every day. On the 14th I delivered her of a still-born female child, which had evidently been dead for a considerable time. Two hours after, I took her temperature; it was 100.4°, and fearing septicæmia, I gave her (having found it of use in other cases of blood-poisoning) large doses of ammonia and chlorate of potash; ordered carbolic acid (1 in 40) to be kept boiling in the room day and night, and the uterus to be syringed with Condy's fluid and water three times a day. The temperature went steadily up until the fourth day, when it reached 105.4°. The patient complained of pain in the throat and great difficulty in swallowing. The temperature kept from 105° to 105.2° until the morning of the tenth day, when it steadily declined until the evening of the twelfth day, then it went up a degree. The patient passed a large quantity of fetid discharge. I ordered the uterus to be syringed every three hours; she continued to improve, and at the end of one month I allowed her to come down stairs. On the sixth day she had some septicæmic spots, which disappeared on the thirteenth day, and throat symptoms on the ninth day. With regard to temperature, for six days and a half it was

over 105°, for nine days over 103°, and for eleven days over 102°.

"The treatment of puerperal fever by constitutional remedies, as distinguished from those which act locally and antiseptically is one of great interest and importance. Those principles which can be applied in the latter case with undoubtedly good effect are not easily carried out in the former. We can conceive that even after local septic activity is arrested, the blood and tissues of remote organs may be extensively infected; and we may naturally inquire whether there are any agents which, administered internally, will arrest the general septic processes, such as the cutaneous changes, which were well-marked in this case, or the analogous processes which we know by pathology are at work in the lungs, kidneys, and other organs. The agents which I employed in this instance have been used by me in similar cases with success, and I venture to think that the facts are worthy of being recorded, though the explanation of the *modus operandi* may not be very distinct. It may be possible that the agents used produced a change in the condition of the blood, which, though very slight, was sufficient to arrest the vitality of the bacteria or micrococci which characterize puerperal infection.

Caffeine as a Cardiac Stimulant.

Dr. Edward T. Bruen thinks that caffeine has not been as widely employed for its action upon the heart as its good effects in the hands of those who have employed it would warrant. In the *Med. News*, January 31, 1885, he publishes the following cases, which testify to its efficacy:

Case 1. A vigorous man of 23, ruddy complexion, in the habit of using alcohol freely, was brought into the Philadelphia Hospital suffering from delirium tremens. There was very rapid, tumultuous, and ineffective action of the heart from the toxic effect of alcohol. Dropsy of the feet. No organic heart disease. Digitalis tried, and found unsatisfactory. Caffeine, 2 grs. four times daily, promptly effective in augmenting the systole. Within a week, its full effect seemed to have been secured. No regulative power was observed, the heart's action continued rapid, and finally became normal when the general balance of the nervous system was restored.

Case 2. A woman of 65 years. Dilated and fatty heart, with mitral regurgitation, hydrothorax, general anasarca, ascites. Was admitted to hospital August 1, and in the interval to November 1 was tapped three times; and various diuretics, always accompanied by digitalis, were given. November 1 she was placed on 4 grs. of caffeine in pill three times daily, and within two weeks a veritable transformation had occurred. Dropsy vanished, and the cardiac systole greatly improved. At date, condition still satisfactory. Caffeine discontinued.

Case 3. Boy of 10 years, with mitral disease, dilated hypertrophy of all the chambers of the heart, influenced by the lesion; ascites. This patient has been under my care for five years. No drug that I have ever used has proved so satisfactory and rapid in its influence as caffeine.

Case 4. Emphysema and cardiac dilatation; and under my observation for several years, finally threatened with evils of cardiac failure, and uræmia imminent. Most satisfactory results from the use of caffeine.

Case 5. Atheroma and aneurism by dilatation. Dilated hypertrophy, with fatty and feeble heart. Digitalis not well borne on account of the pathological changes in the aorta. Jaundice and other evidences of cardiac failure, and venous repletion. Very favorable results from caffeine.

How to Cleanse a Surgeon's Sponge.

We note the following recommendations for this purpose which Dr. John E. Wilson sends to the *New England Medical Monthly*, February 15, 1885. He says that they will never prove disappointing:

℞.	No. 1. Potassæ permanganatis,	grs. xxvj.	
	Aquæ,	1 pint.	M.
℞.	No. 2. Sodæ hyposulphite (commercial),	℥ ij.	
	Aquæ,	℥ xiij.	M.
℞.	No. 3. Glycerine,	℥ ss.	
	Water,	1 pint.	M.

When the soda is dissolved, add muriatic acid 1 ounce. This solution should stand twenty-four hours in order to let the sulphur precipitate, caused by the action of the acid on the soda. It should be poured off in the open air so that the odor of the sulphurous acid will not be inhaled. Having made the sponges free from sand and other impurities by gently beating them, wash them in water and squeeze them out as dry as possible, and place them, a few at a time, in solution No. 1 in a suitable glazed vessel. Let them remain a few moments, or until they have acquired a dark mahogany-brown color. Then they are squeezed dry as possible by hand to free them from the solution. They are then dipped, a few at a time, in solution No. 2. The sponges are allowed to remain in this solution a few moments,

occasionally squeezing them in order to allow the fluid to thoroughly permeate them. Squeeze out and wash in several waters in order to free them from the sulphurous odors. When they are nearly dry, immerse them in solution No. 3. Squeeze by hand, and let them dry in the open air, but not exposed to direct sunlight. This will leave them white, soft, and not rotten, as will most other processes with which I am acquainted and which I have tested. I am satisfied that if once tried, my process will be found to be so simple and satisfactory that no one will use any other.

Non-Penetration of the Lining False Membrane an Unnoticed Danger in Tracheotomy.

Under this heading, Dr. Ashby G. Osborn thus writes to the *Brit. Med. Jour.*, January 19, 1885:

In a recent operation [for laryngo-tracheotomy, on a child about four years old, for croup, where the general condition and the absence of lividity seemed to promise a favorable result, I was baffled at finding, after the insertion of the tube, that but one feeble inspiratory effort with the well known "whiz" of entering air was made, and that artificial inflation failed to distend the lungs.

Though an examination with the finger showed that the tube had entered the wind-pipe, artificial respiration was fruitless, and I had the pain of seeing my little patient die during the operation.

A necropsy revealed the difficulty; the opening into the larynx had been made rather on the right side of the median line, and Fuller's bivalve tracheotomy-tube had passed down between the trachea and the false membrane, thus pressing together the sides of the lining tube of false membrane, and preventing the passage of air.

A freer opening into the larynx or trachea would render it less likely that a false membrane could escape division; and I hope, by placing this failure on record, that more stress may be laid on the importance of this point, as insisted on in the excellent text-books of Holmes or Bryant, where, though a free opening of the normal tissues is recommended, no mention is made of the risk of the canula in its passage pushing before it the undivided false membrane, as happened in this instance.

Nor is the danger alluded to in the discussion which followed Dr. Buchanan's paper on tracheotomy, at the International Medical Congress of 1881. Thus, from the silence of those who have frequently operated, it would appear that this source of danger has not often been met with.

Are Syphilitic Children Necessarily Emaciated?

A very generally accepted view is that children who inherit syphilis are usually, or, we might say, always puny and emaciated. That this view is erroneous, we have felt very strongly, and we are glad to see that so high an authority as Dr. John M. Keating entertains the same idea, for in a clinical lecture published in the *Med. Times*, December 27, 1884, he says:

"Do you always find emaciation in cases of inherited syphilis? By no means, according to my experience. This I wish to impress upon you. Some of you may remember a case which I showed to the class last year, one year of age, which had very large gummæ on the back and on the thighs. The infant was remarkable for its size and appearance of health. My friend Dr. Van Harlingen, who saw the case, pronounced it syphilitic. The child had never been sick a day, but had been born with a "cold," and its mother had previously miscarried, and gave evidence of specific disease.

"One of the worst cases of constitutional syphilis that I ever saw in this house was well nourished—indeed, stout for its age. I have often noticed this, and I believe that it constitutes a characteristic of children who are infected with a mild form of specific disease inherited from parents who have supposed themselves cured before marriage. I would ask you to bear this in mind should a robust and, to all other appearances, healthy infant be brought to you with obscure symptoms—a persistent eczema, or rickets in the ordinary acceptation of the term—it may be really either retarded ossification, or, possibly, osteomalacia."

Large Doses of Belladonna in Incontinence.

Dr. E. Paget Thurstan, in the *Brit. Med. Jour.*, February 7, 1885, says:

"Kate C., aged seven, a delicate child, whose legs were so curved by rachitic deformity that she was scarcely taller than an average child at four years, had been troubled with nocturnal incontinence since her birth. Various plans had been resorted to by the mother without success.

"She was ordered ten minims of tincture of belladonna three times a day. I heard nothing more from her parents, but a fortnight after I happened to meet the mother, and was told the medicine had been persevered in for six days without any appreciable result, and it was evidently looked upon as a hopeless case. I persuaded the mother to try once more. This time

I ordered the belladonna in drachm doses, one dose to be taken in the afternoon, and one four hours later, just before going to bed. These doses caused excitability and a little wandering. The second night there was no incontinence. After that, only one dose a day was taken at bedtime, and this was continued for four more nights. The cure was complete and permanent. Upwards of four months have elapsed, and there has been no recurrence of the trouble.

"*Remarks.*—There can be no doubt, in this case, that the taking of the belladonna and the curing of the incontinence were cause and effect. It is a very clear instance of the different effect of the same drug taken in different doses."

Alveloz for Cancer.

The Washington correspondent of the *New York Med. Jour.* writes to this paper under date of January 26, 1885, that a new and, perhaps, not an indifferent successor to cundurango has sprung up in *alveloz*, a new South American plant recommended as a cancer cure. Our consul at Pernambuco forwarded to the State Department a sample of the drug, with the statement that several cases of alleged cancer had been cured by its application. Unlike cundurango, which was an alleged internal remedy for cancer and syphilis, alveloz is an external application. Its mode of operation is similar to that of jequirity. A profuse suppuration follows its application to a granular surface. On receipt of the medicine, it was turned over to the Marine Hospital Bureau for trial. A portion of the drug was given to Dr. Smith Townsend by the Surgeon-General, for use in a case of lupus of the nose, near the angle of the eye. This case was of nearly forty years' standing, and had resisted all previous treatment. The ulcer was cured within a few days, and the patient was exhibited by Dr. Hamilton at a recent meeting of the medical society. Dr. Hamilton stated that he had under observation an undoubted case of epithelioma of the face, and that, at a future meeting of the Society, he would report the result. He was not sanguine as to the virtues of the drug, but it had certainly done well in the case of the lupoid ulcer.

Chlorine, Iodine, and Bromine, as Disinfectants.

Dr. George H. Rohé, who read a paper on this subject before the American Public Health Association, thus concludes:

1. Chlorine is an efficient disinfectant when present in the proportion of 1 part in 100; provided the air and the objects to be disinfected are in a moist state, and the exposure continues for upwards of one hour.

2. Chlorine, when used in sufficient concentration to act as a trustworthy disinfectant, injures colored fabrics and wearing apparel.

3. Bromine is an efficient disinfectant in the proportion of 1 part in 500; provided the air be in a moist state, and the exposure continues for upwards of three hours.

4. Iodine, in solution, is an efficient disinfectant in the proportion of 1 part in 500; the exposure continuing for two hours.

5. The use of chlorine, and in a greater degree of bromine, requires considerable experience in management; when carelessly handled, they may cause inconvenient or even dangerous symptoms in persons using them; for these reasons they are not suitable as disinfectants for popular use.

Four Twin Births in Succession.

Premising that he can find no recorded case of four consecutive twin pregnancies, Dr. John Hannay publishes the following case in the *Lancet*, January 10, 1885:

On the evening of December 17, I delivered Mrs. O——, aged twenty-nine years, the wife of a small farmer living about two miles from my house, of twins. In conversation, I found that this was the fourth time in succession that she had been delivered of twins. She was born on September 15, 1855, was married on June 1, 1871 (at the age of sixteen years), and had been delivered in order of the following: 1872, July 27, girl; 1874, March 11, boy; 1876, January 18, boy; 1877, October 7, girl; 1880, August 24, twins, boys; 1881, March 12, twins (fourth month) boys; 1883, April 5, twins, boy and girl; 1884, December 17, twins, girls. All the children, with the exception of the one born in 1874 (who died of convulsions in 1876) and the children delivered in 1881, are living and healthy. There was in each case of twins but one placenta. I may add that the left hand of the first child born in December last is absent, the ends of the radius and ulna apparently having no covering but connective tissue and skin. The mother of Mrs. O. had twins upon two occasions, with two single pregnancies between."

A Case of Lodgment of a Breech-Pin in the Brain Recovery.

Dr. G. W. H. Kemper, of Muncie, Indiana, reports in the January number of *The American Journal of Medical Sciences* a very instructive case

in which a lad received a compound fracture of the frontal bone, immediately above the right frontal sinus, by a bursting gun. The breech-pin was found imbedded in the brain, at a distance of one-half inch, and was withdrawn by the aid of dressing-forceps. No untoward symptoms were developed until the evening of the fourth day, when a convulsion ensued because of pent-up pus, and after the removal of the cause no further trouble followed. The lesson to be derived from the study of the case is the necessity of maintaining free drainage, thus preventing an abscess from extending into the brain and becoming fatal.

CORRESPONDENCE.

Alcohol in Disease.

EDS. MED. AND SURG. REPORTER:—

I have just finished reading the last communication of Dr. Hiram Corson, and can keep still no longer. I have never read anything that seemed to me to savor of true science more than do the words of that writer. What a misfortune that all our teachers were not such men as he! I indorse every word he says in regard to the treatment of pneumonia and the use of alcohol.

In an experience of near thirty years, I cannot say that I know of a single life being prolonged by the use of alcohol, but know of a great many being killed by it.

My father died in his eighty-seventh year; his system was not poisoned by alcohol. My mother died on the 29th day of last August, and she would have been ninety-five years old had she lived to the 13th of the following month. She never had any use for alcoholic stimulants, and her mind remained as clear to the very last, apparently, as it ever was. In fact, I do not think she was unconscious for a minute, but just stepped out of the earthly casket into the perfect life.

There has never been anything presented by any one on the treatment of pneumonia that is more correct than the principles laid down by Dr. Hiram Corson.

I will give a single case in my own experience. Enos M——, about fifty years old; system shattered from intemperate habits; after being exposed in a cold rain, was suddenly seized with double pleuro pneumonia. Saw him first about ten hours after; found him very hot, a quick, wiry pulse, and he could scarcely speak or breathe; expectorating a bloody mucus. I opened a vein in his arm and let the blood flow till he breathed easy and the pulse became almost natural; this required a pint and a half. I then gave a cathartic, and followed this with quinine and Dover's powders. Two days after he rode to town, four miles on horse-back. If there is any other treatment that can give as good results, I should like to know it.

L. L. SILVERTHORN, M. D.

Charleston, Ill.

Curious Obstetrical Case.

EDS. MED. AND SURG. REPORTER:—

At the last meeting of the Gibson County Medical Society, Dr. Stephenson, of Dyer, Tenn., reported the following unique case in obstetrics:

Mrs. ——, several years ago (about five years, I believe), gave birth to a living child under the care of a midwife, a thoroughly truthful and reliable woman. After the birth of this child there was no lochial discharge of any kind—no after-pains—nothing that indicated that labor had taken place, except the child. About the third or fourth day after the birth of the child he, Dr. S., was called to see the mother, on account of her size and the absence of the lochiæ. He made an examination of the mother, and found the facts as above stated. Upon palpating and auscultating the woman's abdomen he detected the movements of the child in utero, and distinguished plainly the action of the fœtal heart. He thereupon informed the woman and midwife that there was another child in utero, and that her size was due to that fact. He made no vaginal examination, inasmuch as the woman was apparently doing well.

On the seventh day after the birth of the first child, the mother brought forth a second healthy living child at full term. After the birth of the second child the lochial discharge came on, and everything progressed as in any normal labor. The children both lived, and were seen by both Dr. S. and other members of the society. Dr. S. then read a letter to the society from the husband of the lady, relating to her last confinement, which occurred in the latter part of 1884, or the first of this year. The letter stated that the last labor was a duplicate of the former one, except that the interval between the births of the twins in this latter case was eight days, whereas it was seven in the former. In the first case the children were both girls; in the second, both boys. Who has met with a similar case?

Trenton, Tenn. T. J. HAPPEL, M. D.

Rash from Salicylate of Soda.

EDS. MED. AND SURG. REPORTER:—

The following case may interest your readers:

March 2. Called to see Miss P——, aged twenty, suffering from an acute attack of inflammatory rheumatism affecting the knees and ankles; prescribed the following:

℞. Salicylate of soda, ℥ss.
Water, ℥iv.

M.—Teaspoonful every three hours.

March 3. Somewhat better. Treatment continued.

March 4. Pain and swelling subsiding, but face covered with a bright rash, somewhat resembling measles, which gave great uneasiness from itching; some rash, also, on hands, arms, and body. I did not at first know to what to attribute the rash, and continued the rheumatic treatment.

March 4. Rheumatism better, but rash worse. I then ordered the salicylate to be discontinued, and there was a decided change in the rash within twelve hours for the better; but when, two days later, I again attempted to give it, the rash promptly reappeared. I have very frequently

prescribed the same for rheumatic patients before, and never saw a rash follow. I should like to hear of any one else who has had a like experience.

J. W. PARSONS, M. D.

Canton, Pa., March 14, 1885.

NEWS AND MISCELLANY.

An Ideal Medical Life.

The following observations from the *Lancet*, January 10, 1885, are so worthy of perusal by all physicians that we gladly reproduce them:

"The constant recurrence of cases appealing strongly to the sympathies of the profession is a very noticeable fact. Medical life in its ideal is like that of 'virtuous Heberden,' divided into three periods, one of arduous learning, followed by one of equally arduous practice, at once beneficent and profitable, and this crowned by an age of honor, and authority, and rest—the rest only made sweeter by being used for formulating and transmitting the lessons of experience. There is nothing in such a life as his, extending over ninety years, to excite pain or regret. The very change from practice to rest is made easily: the summer spent chiefly at Windsor, and the favorite art, not to say the friendly patients, being still a chief concern of the winter months. This is the ideal, we say, of medical life—one to be worked up to by every medical student and every medical practitioner, but admittedly only an ideal, unattainable by the majority of the four-and-twenty thousand who compose the Medical Register. The ninety years that were given to Heberden for working out his life were in themselves a great and fundamental gift that is not given to many, and without which he could not have completed the picture and the model which are suggested by his character and his history. But still we must have the ideal, and demand of all good men and true that they work up to it. We may not reach Heberden's fame any more than we may reach his age, but we shall certainly get some way towards both by considering how he deported himself.

"There is one feature in his life that strikes us, and which is neither hopelessly inimitable nor completely irrelevant to our present purpose. He did not make haste. He was deliberate. He did not clutch at the sweets of life. And though he waited—shall we say because he waited?—all things came to him. He took all the great steps of his life deliberately, and he put his foot down firmly. Though he was born in 1710, he was not married till 1760. He practiced ten years in Cambridge before he came to London, where he did not begin practice till he was thirty-eight. This was in the year 1748. His success soon became great, and some twelve years after coming to London, George III. wished him to become physician to Her Majesty the Queen. The proposal was significant, but more significant still was Heberden's respectful refusal of it. Such was the respect of the King for Heberden that he not only took kindly his refusal of this great offer, but as kindly accepted Heberden's nomination of a friend for the office, Dr. Leatherland, a man of great worth, learning, and modesty. Surely in this quality of deliberation, not to say slowness, we see some secret of Heberden's success, of his independence, of the dignity, and we must add the charity, of his life. We live fast now. We live in the time of a race of luxury. We must marry soon, and soon be rich. The motto of an old philosopher, 'Quantis non egeo,' is accepted with the omission of the little monosyllablic word in the middle, and before we are all diplomatized, we are saying, 'How many things there are which I want and must immediately have.' A large house, a showy carriage, and everything to match. Every want recognized is the parent of many more. In every branch of the profession, as indeed in every class of society there is the same tendency to multiply wants and to complicate one's establishment. It is all well that ends well. But our pages tell only too pathetically that it does not always end well; on the contrary, that it ends painfully and pitifully. We are not demanding any unreasonable amount of prudence or self-denial in the forecast of life and success. We are not prescribing a gloomy celibacy for every man until he is fifty, or till he is assured of fortune and of fame. We are only reminding our readers that a little more slowness and deliberation in the great steps of life and a little more determination to keep wants few will bring their reward. They may not bring fame; but with reasonable diligence and forethought they will bring ease and competence, and secure those who look to us and may survive us from painful dependence on others. In London especially there is little excuse for any medical man leaving his family entirely unprovided for. There is a society—that for the Relief of Widows and Orphans of Medical Men within the postal district of London—to which it is almost culpable for such medical men not to belong. Should they die poor, their widows and children are provided against destitution on easy and yet independent terms. Should they die in easier circumstances, they have the satisfaction of knowing that they have contributed to the help and comfort of less successful brethren. This society has constantly to press its advantages on the profession, nevertheless, numbers of medical men die without the comfort of knowing that by subscribing to it they have secured these advantages for those whom they love. We are well aware of other circumstances in social and professional life at the present which make deliberation and providence difficult, but they do not make them less binding, or the omission of them more excusable."

Comparative Anatomy.

The *Popular Science News* for February, 1885, has the following:

A young Irishman visited Rome, and there met a friend and fellow-countryman who was pursuing the avocation of a butcher. The butcher acted as his guide; and this is a part of Pat's story of sight-seeing, as told to his sweetheart upon his return:

"The most wonderful thing I saw in Rome was a shtone man."

"A shtone man?" ejaculated Mary.

"Yes," replied Pat; "and they called him

the Polly Belvedere. As we were looking at the shtone man, says the butcher to me, says he, 'Pat, you and the Polly Belvedere are very much aloike.' And be that, we measured. I was broader than him in the fut, but he was higher than me in the inshtep. I was larger than him around the ankle, but he had me in the calf of the leg. My knee was larger than his, but he was better than me in the thigh. My belly was twice as large around as his, but his brist was twice as large around as mine. Then, again, my neck was much larger than his, but his head was much larger than mine. But, as the butcher said, on the general average we were just about the same thing."

General Gordon from a Medical Point of View.

We read as follows in the *Boston M. and S. Journal*, February 12, 1885:

General Gordon's life is as great a mystery as his character. His physical endurance in the desert would be difficult to understand in a strong man; but in a man with angina pectoris, and with a horror of meals, it is simply a kind of miracle. As far back as November 15, 1878, and in that very Khartoum on which the eyes of all Christian nations are turned, he writes: "There are not nine Europeans in the Soudan, and they vegetate and do not live. Can you conceive what it is never to have any desire to eat? That is my case. I hate the operation. * * * My angina pectoris has not troubled me lately. According to medical books it is not known what occasions this. It is heart disease, and makes you think you are on the brink of death. A rush of blood takes place to the heart, and you think all is over. I may say I have died suddenly over a hundred times." We can only find encouragement in such facts to go on hoping that against all human and medical probabilities Gordon will again emerge from the Soudan, and long continue to show the world what can be done by men with grave disease, but with faith in their own mission and in God's providence.

Vienna Surgery.

A writer in the *Pacific Med. and Surg. Journal* says:

I recently saw a case of "Vienna" or "bold" surgery (which generally means an operation done for the benefit of the surgeon instead of the patient). A woman was brought in, suffering from strangulated femoral hernia of three days' standing. Although taxis failed to reduce it, there were no very urgent symptoms as yet present. The operation (which was done at 11 o'clock at night) was accomplished successfully, and secundum artem, as far as the division of the constricting band. The gut slipped back just as soon as the constriction was divided, and *before* it was seen whether the strangulated part was gangrenous or not. The consultant immediately decided that an *abdominal section* should be made *to see if the gut was gangrenous or not!* The operator and most of those present objected, but the consultant decided otherwise, and an abdominal section was made, and the gut found all right. The *operation* was a success, but the woman died promptly (in fifty hours).

Official List of Changes of Stations and Duties of Medical Officers of the United States Marine Hospital Service, for the week ended March 21, 1885.

Sawtelle, H. W., surgeon. Detailed as chairman of Board for physical examination of officer of the Revenue Marine Service, March 17, 1885.

Armstrong, S. T., passed assistant surgeon. Granted leave of absence for thirty days, March 16, 1885.

Ames, R. P. M., passed assistant surgeon. Detailed as recorder of Board for physical examination of officer of the Revenue Marine Service, March 17, 1885.

Items.

—Prof. Hyrtl celebrated, a few days since, his 74th birthday in full mental and bodily vigor. He was, on this occasion, the recipient of many congratulations from his friends, both at home and abroad.

—For pruritus vulvæ, Dr. George Locke states in the *Lancet*, January 31, 1885, that pixene, used as directed for lotions—viz., two drachms of pixene and half an ounce of glycerine to six ounces of water—will have at once a soothing and curative effect.

—General Briere de l'Isle has sent a request to the War Department for a large quantity of quinine for the use of French soldiers in Tonquin. According to General de l'Isle, the present French force in Tonquin consumes $1,800 worth of quinine every month.

—The wrathful reader and the urbane journalist:

A fierce subscriber: "Sir, cuss your paper! Send it to h—."

Editor: "Thomas, change the gentleman's address. If Uncle Sam makes connection, you'll find your paper there."

—Mr. Lowndes reports in the *Liverpool Medical and Surgical Journal* the case of a young girl, aged fourteen, to whom syphilis had been communicated during criminal assault by a man imbued with the superstition common among the lower orders, that sexual intercourse with a virgin is a cure for gonorrhœal and syphilitic diseases.

—Dr. Debove stated at the Société Médicale des Hôpitaux, that he had obtained a rapid cure in several cases of obstinate sciatica by applying chloride of methyl, in the form of pulverizations, along the course of the sciatic nerve. The chloride reduces the temperature to 23° below zero, Cent., and his success has been remarkable.—*Gazette des Hôpitaux.*

—*La Gazzetta degli Ospitali* reports that experimental researches on the physiological action of tobacco have led Dr. Zulinsky to the following conclusions: The poisonous action of tobacco smoke does not wholly depend on nicotine; when this is eliminated tobacco smoke still remains noxious, on account of the alkaloid colidine. It also contains oxide of carbon, hydrocyanic acid, and other deleterious principles.

—The Russian doctor who has invented "Psychopathy" is to be congratulated on his ingenuity and fertility of resource, rather than on his scientific acumen. The mental craze and moral hebetude included under this new term is a perfectly well-recognized form of what Dr. Prichard classed as "moral insanity." No creation of a special term was necessary.

—Medical expert (on the witness-stand): "No, sir, it would have been impossible for the accused to quietly think out his plans for committing the murder while walking on Broadway."

Counsel for the defendant: "State why, doctor."

Medical expert: "Because Broadway is the main artery of the city, and my professional skill teaches me that a quiet vein of thought on a main artery is paradoxical and absurd."

—According to the *London Medical Press*, M. Cazin reported to a recent meeting of the Paris Surgical Society that a patient who had been married many years suffered from such a degree of vaginismus that marital intercourse had never taken place. The vulva and vagina were painted with a solution of cocaine, with the result that the hyperæsthesia was so far diminished and for so long a time that an attempt was at last successful.

—A genius has invented a cushion with a spiral spring, to be worn by skaters where it will do the most good. When a skater who wears one of the contrivances sits down unexpectedly and in italics, as it were, the spring throws him right on his feet again before he is fully aware that there has been an accident. The other night a young man provided with one of these inventions fell a little too hard, and the spiral spring reversed him so violently that the rebound pitched him forward and broke his nose. He will sue the inventor for $10,000 damages.

—At a recent meeting of the St. Petersburg Health Committee, Professor Borking, speaking of the large death-rate in the hospitals of that city, said that he had come to the conclusion that the patients died mostly from weakness; for with their daily allowance of thirteen or fourteen copecks, they cannot even buy a pound of beef for broth. In addition to this, the nurses, who are very badly paid, are reported to steal the food of the patients whenever they can. Surprise is also sometimes expressed in St. Petersburg society at the rapid growth of wealth among hospital authorities.

—The estimate of the quantity of medicines, etc., required for the use of the patients in the Paris hospitals for the present year is as follows: 24,000 kilogrammes of liquorice root, 15,000 of cinchona, 80,000 of linseed, 6,000 of mustard, 15,000 of cod-liver oil, 20,000 of glycerine, 3,000 of orange-flower water, 250 of opium, 2,000 of bromide of potassium, 50 of nitrate of silver, 500 of the subnitrate of bismuth, 60 of sulphate of quinine, 12,000 of carbolic acid, 10,000 of chloral. In addition to these drugs, the hospitals are annually supplied with 30,000 fresh lemons and 40,000 leeches. Fresh herbs are estimated to cost 1946 francs; dry herbs, 45,000 francs.

—According to the *London Medical Press*, Dr. Anton Kezma, of Buda-Pesth, reports that a small piece of Japanese paper, 3 to 4 mm. square, saturated with 3 mgrm. of aconitine and pressed into the hollow tooth, previously cleaned out and dried, and then covered with an occlusive covering of gutta-percha, anæsthetizes the sensitive dentine that renders operations on carious teeth so painful. The larger the quantity of aconitine employed, the more quickly is the desired effect produced, and the longer it lasts. The effect generally continues from twenty-four to forty-eight hours.

—Dr. J. G. Van Marter, of Rome, has discovered at Corneto, near Cività Vecchia, two specimens of ancient dentistry as practiced by the Etruscans, the tombs in which they were found dating from the fifth century before the Christian era. Dr. Van Marter describes this treasure-trove as the "earliest known essay in dental bridge-work," and is at present prosecuting his researches into the practice of stopping the teeth, of which indications have already been noted in prehistoric tombs. An interesting paper on the subject has already been contributed by him to the *Independent Practitioner* of New York.

—A case which may possibly be an example of tropho-neurosis is recorded by M. Lemmonier in the *France Médicale* of December 25. The patient was a young man aged nineteen, who sustained severe injury to the skull after a fall from a height of about six feet. Hemiplegia of the right side, and rapid atrophy of the testicle and of the right upper limb, are the chief phenomena recorded. There was considerable disturbance of consciousness, but ultimately the patient appears to have recovered to a large extent. The hemiplegia was probably dependent upon compression by blood poured out as the result of the fracture of the base of the skull. No other conditions seem to have been present to account for the rapid wasting of the arm or testicle. Nélaton and others have spoken of the possibility of atrophy of the testicle resulting from causes acting at a distance.

—A young country dentist was recently favored with a commission to make and fit a complete set of teeth for the Anglican bishop of the diocese in which he resided. The dentist was very anxious about the result of his labor, and watched his lordship examining himself and his new teeth in the pier glass. His chagrin may be imagined when he heard the bishop give expression to language ending with that fearful word, "damnation." He ventured to suggest that his lordship might feel them rather uncomfortable at first, but in a little time he would get used to them. Without appearing to notice the dentist, his lordship exclaimed, with vehemence: "Without doubt he shall perish everlastingly." "But indeed, my lord, if you will but have patience," pleaded the dentist, "in a week's time or so—" "What do you mean?" inquired the prelate, turning round with an apostolic smile. "Why should I not have patience? The teeth fit me beautifully; it is the first time I have found myself able to pronounce the Athanasian creed with distinctness for these twenty years."